

California Public Utilities Commission  
**West of Devers Upgrade Project**

Mitigation Monitoring, Compliance,  
and Reporting Plan

**June 2018**

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### 1 INTRODUCTION

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The Final Environmental Impact Report (EIR) for the West of Devers Upgrade Project, as adopted by the California Public Utilities Commission (CPUC) on August 18, 2016, includes procedures for preparing and implementing a Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) to ensure compliance with mitigation measures approved in the Final EIR, as well as with the terms and conditions associated with the BLM Right of Way Grant. The CPUC is the Lead Agency under the California Environmental Quality Act (CEQA). The Lead Agency for the National Environmental Policy Act (NEPA) is the Bureau of Land Management (BLM), which issued a Record of Decision approving the project on December 27, 2016.

Section H of the Final EIR and Section H of the Final EIS provide the recommended framework for the implementation of the MMCRP by the CPUC (CEQA Lead Agency) and the BLM (NEPA Lead Agency), and describes the roles and responsibilities of government agencies in implementing and enforcing adopted MMs. This MMCRP includes the information provided in EIR Section H, as well as specific protocols to be followed prior to and during construction by CPUC third-party Environmental Monitors (CPUC EMs) and SCE project staff. Long-term monitoring during operations and maintenance will be addressed through consultation and a plan with the appropriate resource agencies.

The project's MMCRP includes direct participation and commitment from SCE, the Engineer/Procure/Construct (EPC) Contractor (Barnard Construction Company, Inc. [Barnard or Contractor]), SCE Self-performance Contractor(s), and CPUC EMs. The success of the program depends on the project management staff, monitors, and construction contractor personnel. Therefore, the goal of the MMCRP is to provide a clear understanding of the project's organization, establish lines of communication, and effectively document and report compliance with all of the mitigation measures.

The MMCRP was developed to provide guidelines and standardize procedures for environmental compliance on the project. The procedures have been developed by the CPUC and BLM, in coordination with SCE and other responsible agencies and Tribes to help define the reporting relationships, provide detailed information about the roles and responsibilities of the project's environmental compliance team members, define compliance reporting procedures, and to establish a communication protocol. The communication lists in the MMCRP will be updated throughout construction.

#### 1.1 PROJECT OVERVIEW

The approved West of Devers Upgrade Project (Project) includes a combination of the Tower Relocation Alternative and the Iowa Street 66 kV Underground Alternative from the Final EIR, as well as the Proposed Project for the segments unaffected by the Tower Relocation and Iowa



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Street Alternatives. The Project involves the construction, operation, and maintenance by Southern California Edison (SCE) of the following major components:

- Removal and upgrade of existing 220 kV transmission lines. Upgrades would occur on 30 miles of the Devers–El Casco line, 14 miles of the El Casco–San Bernardino line, 43 miles of the Devers–San Bernardino line, 45 miles of the Devers–Vista No. 1 and No. 2 lines, 3.5 miles of the Etiwanda–San Bernardino line, and 3.5 miles of the San Bernardino–Vista line.
- Upgrade substation equipment at Devers, El Casco, Etiwanda, San Bernardino, and Vista Substations to accommodate increased power transfer on 220 kV lines.
- Removal and relocation of 2 miles of two existing 66 kV subtransmission lines, including 1,600 feet of underground 66 kV subtransmission line in Iowa Street (per the Iowa Street Underground Alternative).
- Removal and relocation of 4 miles of existing 12 kV distribution lines.
- Installation of telecommunication lines and equipment for the protection, monitoring, and control of transmission lines and substation equipment.

The Project would be located within the existing West of Devers right-of way (ROW) corridor in incorporated and unincorporated areas of Riverside and San Bernardino Counties. The ROW passes through the reservation trust land of the Morongo Band of Mission Indians and the cities of Banning, Beaumont, Calimesa, Colton, Grand Terrace, Loma Linda, Palm Springs, Rancho Cucamonga, Redlands, and San Bernardino.

Project alignment sheets, by segment and staging area, are provided in Attachment A. SCE's Final Helicopter Use Plan is provided in Attachment B.

## 1.2 MONITORING PROGRAM

### 1.2.1 Authority

The California Public Utilities Commission (CPUC) has broad regulatory authority under Article XII of the California Constitution and Section 702 of the Public Utilities Code (PU Code) mandates that every public utility obey and comply with every order, decision, direction or rule made by the Commission. Public utilities are subject to enforcement action and fines pursuant to PU Code Sections 2102-1015, 2017, 2108, and 2114. In 2013, the CPUC established a CEQA Citation Program authorizing Staff to fine public utilities for non-compliance with Permits to Construct (PTCs) and Certificates of Public Convenience and Necessity (CPCNs). MMCRPs are adopted as part of PTCs and CPCNs and are enforced as such.

Monitoring of mitigation measures to be implemented by a project is required by California Environmental Quality Act (CEQA). Section 21081.6 of the California Public Resources Code (PRC) requires a public agency to adopt a mitigation monitoring and reporting program when

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it approves a project that is subject to preparation of an Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND) and where significant adverse environmental effects have been identified. CEQA Guidelines Section 15097 clarifies requirements for mitigation monitoring or reporting.

Mitigation measures to be implemented as part of the Project (Application No. A.11-11-020) were identified in the Final EIR and Addendum to the Final EIR prepared by the CPUC, and in the Final EIS prepared by BLM for the Project. The EIR was adopted by the CPUC on August 16, 2016 in Decision D.16-08-017 and includes procedures for preparing and implementing a Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) to ensure compliance with mitigation measures approved in the EIR. In addition, Applicant Proposed Measures (APMs) were adopted as part of the EIR. The mitigation measures and APMs identified in the EIR provide the framework for this MMCRP.

## 1.2.2 Purpose

The MMCRP provides guidelines and procedures for environmental compliance on the Project. The MMCRP was developed by CPUC in coordination with SCE and CPUC Environmental Monitors (CPUC EMs) and defines the reporting relationships, provides information regarding the roles and responsibilities of the Project's environmental compliance personnel, sets out compliance reporting procedures, and establishes a communication protocol. The communication information as listed in the MMCRP will be updated throughout construction.

The purpose of this MMCRP is to ensure effective implementation of the mitigation measures and APMs identified in the EIR/EIS and Addendum, as imposed by the CPUC and BLM as part of project approvals. It describes the logistics of the monitoring process and establishes protocols to be followed by CPUC's third-party Environmental Monitors, SCE project staff, Barnard, and its subcontractors. This MMCRP includes:

- Procedures for approving minor project changes;
- Procedures for dispute resolution;
- APMs and mitigation measures that SCE must implement as part of the Proposed Project;
- Actions required to implement these measures;
- Monitoring requirements; and
- Timing of implementation for each measure.

Section 6 presents the mitigation measures, the timing for completion, and whether CPUC review or approval is required before construction can commence.

A draft version of the MMCRP was distributed to SCE and CPUC EMs for review and comment. Final language of the MMCRP was made in consultation with SCE.

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## 1.2.3 Implementation of MMCRP

Implementation of the MMCRP will end when CPUC determines there is no further need for CPUC monitoring of the Project. SCE is required to perform post-construction monitoring for the project to satisfy APM and mitigation measure requirements that are listed in the implementation tables found in Attachments C, D, and E. It is expected that post-construction monitoring and implementation of the MMCRP will continue for an appropriate amount of time (estimated 3 to 5 years) to verify that post-construction requirements (i.e., revegetation) have been met.

## 1.3 CONSTRUCTION SCHEDULE

The estimated overall construction schedule for the project and duration of work for key construction activities are presented in Table 1.3-1. The estimated start date for construction is August 2017 with complete project energization by October 2021. The actual construction schedule may vary based upon many factors, including the timeline for additional agency approvals and land acquisition, environmental conditions, and any necessary changes to the project design due to unexpected physical conditions. Construction in the various project segments and project components will occur intermittently throughout the overall project duration, based on approved project outages, material availability, and required construction sequencing.

**Table 1.3-1. Construction Schedule**

<b>Construction Activity</b>	<b>Estimated Duration</b>	<b>Preliminary Schedule</b>
Staging Yard Preparation and Mobilization	5 Months	Feb 18 -Jun 18
Site Preparation and Road Construction	17 Months	May 18-Sep 19
Wire and Structure Removal	40 Months	Sep 18-Dec 21
Shoo-Fly Installation	41 Months	May 18-Oct 21
Foundation Construction	18 Months	May 18-Oct 19
Structure Assembly and Erection	31 Months	Sep 18-Mar 21
Wire Stringing	39 Months	Oct 18-Dec 21
Substation Upgrades	39 Months	Oct 17-Dec 20
66 kV Underground	4 Months	Apr 18-Jul 18
12 kV Underground	6 Months	Apr 18-Sep 18
Distribution Line Work	7 Months	Apr 18-Oct 18
Telecommunication Work (not associated with T-Line)	12 Months	Oct 17-Oct 18

Project-related construction activities (beyond such pre-construction activities as engineering, design, studies, and permitting) will not begin until the CPUC's Project Manager has issued one

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or more Notices to Proceed (NTPs) covering the planned activities. SCE’s anticipated NTP requests for construction, including estimated start date, are provided in Table 1.3-2.

**Table 1.3-2. Construction NTPs**

<b>Notice to Proceed</b>	<b>Description</b>	<b>Location</b>
1	Yards	San Bernardino/Riverside County
2	Substations	San Bernardino/Riverside County
3	Subtransmission, Distribution, Telecom	San Bernardino/Riverside County
4	Transmission Line (Non-BLM Land)	San Bernardino/Riverside County
5	Transmission Line (BLM Land)	Riverside County

**IMPORTANT:** Before work can proceed on a work package, a request for an NTP must be made by SCE and approved by the CPUC Project Manager (see Section 4.3). The mitigation measures and APMs listed in Section 6 include the locations where these requirements apply and which must be implemented prior to the commencement of construction. SCE will work closely with Barnard to ensure that site-specific mitigation measures and APMs are clearly identified and implemented. CPUC EMs will verify the implementation of mitigation measures and APMs prior to and during construction.

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### 2.1 MITIGATION, APMs & Conservation Measures

The Project is subject to APMs and mitigation measures identified in the Final EIR, Final EIR Addendum, and Final EIS that are collectively referred to as mitigation. In addition, the BLM Record of Decision (ROD) included final mitigation measures based on those presented in the Final EIS<sup>1</sup>. Attachments C, D, and E list all APMs and mitigation measures that are applicable to the approved Project. These attachments are modified versions of the mitigation measures included in Chapter D of the Final EIR, Final EIR Addendum, and Final EIS/BLM ROD and are the core components of the MMCRP. In addition, conservation measures specified by the U.S. Fish and Wildlife Service (USFWS) Biological Opinion are included as well. Attachments C, D, and E represent different implementation phases (pre-construction, construction, post-construction /operation and maintenance). For example, Attachment C requirements will be used to track and verify SCE compliance with pre-construction mitigation requirements for each NTP request. Whereas, Attachment D will be used by the CPUC and SCE monitors to track mitigation compliance during construction. In addition, as part of their project permitting process, SCE developed a Nesting Bird Management Plan (the NBMP) in consultation with CPUC, USFWS, and California Department of Fish and Wildlife (CDFW). The NBMP will be implemented during construction and is available in Attachment F.

### 2.2 PERMITS AND AUTHORIZATIONS

The CPUC and the BLM are the Lead Agencies for the Project. However, the Project route crosses lands, affects resources, or requires activities that are under the jurisdiction of or regulated by other agencies and Tribes. These agencies that may require separate permits or approvals are listed in Table 2.2-1. Contact information for individual agencies is provided in Table 2.2-2.

All required permits are to be secured and their terms and conditions implemented prior to undertaking any work that requires such permits. All permits acquired for the Project shall be provided to the CPUC prior to undertaking work authorized by any permits. SCE will provide notice to the CPUC of agency contacts, direction, and resolutions. Under their own authority and discretion, permitting agencies may implement their own monitoring and reporting schemes and undertake whatever enforcement actions they are authorized to pursue.

**IMPORTANT:** The status of required permits will be included in any request for an NTP. Copies of permits, including any permit requirements and stipulations, shall be provided to CPUC.

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<sup>1</sup> The mitigation measures presented in the BLM ROD supersede those presented in the Final EIS.

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**Table 2.2-1. Permits that May Be Required for the West of Devers Upgrade Project**

Agency	Jurisdiction	Requirements
<b>Federal Agencies</b>		
U.S. Bureau of Land Management (BLM)	Construction on or in lands administered by the BLM	<ul style="list-style-type: none"> <li>▪ Amendment to Right-of-Way Grant / Record of Decision / Notice to Proceed for transmission line</li> <li>▪ Temporary Use Permit</li> </ul>
U.S. Bureau of Indian Affairs (BIA)	Tribal lands	<ul style="list-style-type: none"> <li>▪ Right-of-Way Grant/Easement</li> </ul>
U.S. Fish and Wildlife Service (USFWS)	Protection of federal listed, threatened and endangered species	<ul style="list-style-type: none"> <li>▪ Consultation for Section 7 of the Endangered Species Act</li> <li>▪ Habitat Conservation Plans – Riverside County</li> </ul>
U.S. Environmental Protection Agency	Activities which result in any discharge of fill material into waters of the U.S. within tribal land	<ul style="list-style-type: none"> <li>▪ Section 401 Clean Water Act</li> </ul>
U.S. Army Corps of Engineers (USACE), Los Angeles District	Activities which result in any discharge of fill material into waters of the U.S.	<ul style="list-style-type: none"> <li>▪ Section 404 Permit – streambed alteration/crossing</li> </ul>
Federal Aviation Administration (FAA)	Air safety near San Bernardino International Airport and Banning Municipal Airport	<ul style="list-style-type: none"> <li>▪ Form 7460–1, Notice of Proposed Construction or Alteration; Permit and Notice to Airmen</li> </ul>
Federal Communications Commission (FCC)	Licenses/permits related to FCC frequencies and paths	<ul style="list-style-type: none"> <li>▪ Telecommunications Permit (as required)</li> </ul>
Federal Energy Regulatory Commission (FERC)	Ratemaking for transmission facilities	<ul style="list-style-type: none"> <li>▪ Ratemaking</li> </ul>
<b>Tribal Land</b>		
Morongo Band of Mission Indians	Reservation lands	<ul style="list-style-type: none"> <li>▪ Consent to Right-of-Way Grant/Easement</li> </ul>
<b>State or Regional Agencies</b>		
California Public Utilities Commission (CPUC)	Transmission, substation, generation projects 50 kV and above	<ul style="list-style-type: none"> <li>▪ Certificate of Public Convenience and Necessity</li> </ul>
California Department of Fish and Wildlife (CDFW)	Protection of fish, wildlife, plant resources and habitats	<ul style="list-style-type: none"> <li>▪ Streambed Alteration Agreement, Section 1602 Permit (if required)</li> <li>▪ Section 2081 ITP</li> </ul>
Regional Water Quality Control Board (RWQCB) – Colorado River Office (Region 7) and Santa Ana Office (Region 8)	Protection of surface waters under the Clean Water Act	<ul style="list-style-type: none"> <li>▪ Clean Water Act Section 402, General Permit for Storm Water Discharges Associated with Construction Activities</li> </ul>
State Water Resource Control Board (SWRCB)	Protection of surface waters under the Clean Water Act	<ul style="list-style-type: none"> <li>▪ Clean Water Act Section 401 certification</li> </ul>
California State Lands Commission (CSLC)	State lands	<ul style="list-style-type: none"> <li>▪ Right-of-Way Easement</li> </ul>

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**Table 2.2-1. Permits that May Be Required for the West of Devers Upgrade Project**

Agency	Jurisdiction	Requirements
California Department of Transportation (Caltrans) – District 8	California Streets and Highways Code 660-711.21 CCR 1411.1-1411.6	<ul style="list-style-type: none"> <li>▪ Overload Permit</li> <li>▪ Road/Highway Encroachment/Crossing Permits for activity in San Bernardino and Riverside Counties</li> </ul>
California Department of Water Resources (DWR)	Encroachment of water lines	<ul style="list-style-type: none"> <li>▪ For construction activities crossing water line in Segment 2</li> </ul>
Metropolitan Water District (MWD) of Southern California	Encroachment of Colorado River Aqueduct	<ul style="list-style-type: none"> <li>▪ For construction activity crossing aqueduct in Segment 6</li> </ul>
Department of Toxic Substances Control (DTSC)	Handling hazardous materials under Hazardous Waste Control Act of 1972	<ul style="list-style-type: none"> <li>▪ EPA Hazardous Waste Generator ID</li> </ul>
State Historic Preservation Office (SHPO)	Any archaeological or paleontological work	<ul style="list-style-type: none"> <li>▪ Cultural Resources Use Permit, Field Use Authorization, or an ARPA Permit (if required)</li> <li>▪ Consultation for Section 106 of the National Historic Preservation Act</li> </ul>
California Air Resources Board (CARB)	Portable emissions sources	<ul style="list-style-type: none"> <li>▪ Portable Engine Registration for specified non-mobile portable engines.</li> </ul>
South Coast Air Quality Management District (SCAQMD)	South Coast Air Basin and Coachella Valley	<ul style="list-style-type: none"> <li>▪ Fugitive Dust Control Plan</li> </ul>
<b>Local Agencies</b>		
Riverside County	County roads and highways, flood control/drainage channels	<ul style="list-style-type: none"> <li>▪ Road/Highway Encroachment/Crossing Permit</li> <li>▪ Flood Control/Drainage Channel Encroachment/Crossing Permit</li> </ul>
San Bernardino County	County roads and highways, flood control/drainage channels	<ul style="list-style-type: none"> <li>▪ Road/Highway Encroachment/Crossing Permit</li> <li>▪ Flood Control/Drainage Channel Encroachment/Crossing Permit</li> </ul>
Western Riverside County Regional Conservation Authority	Western Riverside Multiple Species Habitat Conservation Plan (MSHCP)	<ul style="list-style-type: none"> <li>▪ Certificate of Inclusion</li> </ul>
Coachella Valley Conservation Commission	Coachella Valley MSHCP	<ul style="list-style-type: none"> <li>▪ Certificate of Inclusion</li> </ul>
Cities	City streets, sidewalks, flood control/drainage channels, lands	<ul style="list-style-type: none"> <li>▪ Road Encroachment/Crossing Permit</li> <li>▪ Flood Control Channel Encroachment/Crossing Permit</li> <li>▪ Temporary Use/Occupancy Permit, for material and storage yards</li> <li>▪ Storm Water Pollution Prevention Plan</li> </ul>

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**Table 2.2-1. Permits that May Be Required for the West of Devers Upgrade Project**

Agency	Jurisdiction	Requirements
<b>Other Utilities</b>		
Kinder Morgan (El Paso) Natural Gas Pipeline	Activities in area of natural gas pipelines	▪ Pipeline Encroachment/Crossing Permit
Questar Southern Trails Pipeline Company	Activities in area of natural gas pipelines	▪ Pipeline Encroachment/Crossing Permit
Southern California Gas Company	Activities in area of natural gas pipelines	▪ Pipeline Encroachment/Crossing Permit
BNSF Railroad	Activities in area of railroad	▪ Encroachment/Crossing Permit Const. D-2738 and D-2739



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**Table 2.2-2. Jurisdictional Agencies Associated with the West of Devers Upgrade Project**

Agency	Address	Contact Person	Phone	Email Address
<b>Lead Agencies</b>				
California Public Utilities Commission	505 Van Ness Ave, San Francisco, CA 94102	Billie Blanchard	415-703-2068	<a href="mailto:BCB@cpuc.ca.gov">BCB@cpuc.ca.gov</a>
U.S. Bureau of Land Management	Palm Springs/South Coast Field Office 1201 Bird Center Drive Palm Springs, CA 92262	Brandon Anderson	760-833-7140	<a href="mailto:bganderson@blm.com">bganderson@blm.com</a>
		Mark DeMaio	760-833-7124	<a href="mailto:mdemaio@blm.gov">mdemaio@blm.gov</a>
		Doug Herrema		<a href="mailto:dherrema@blm.gov">dherrema@blm.gov</a>
		Mark Massar (biology)	760-833-7121	<a href="mailto:mark_massar@blm.gov">mark_massar@blm.gov</a>
		John Dalton	951-697-5311; 951-956-3578 (c)	<a href="mailto:jdalton@blm.gov">jdalton@blm.gov</a>
		George Kline (cultural)	760-833-7135	<a href="mailto:george_kline@blm.gov">george_kline@blm.gov</a>
<b>Native American Tribes</b>				
Morongo Band of Mission Indians	12700 Pumarra Road Banning, CA 92220	Karen Woodard	951-849-4697	<a href="mailto:kwoodard@morongo-nsn.gov">kwoodard@morongo-nsn.gov</a>
<b>Other Federal Agencies</b>				
United States Fish & Wildlife Service	U.S. Fish and Wildlife Service Palm Springs Fish and Wildlife Office 777 E. Tahquitz Canyon Way, Suite 208 Palm Springs, CA 92262	Jenness McBride	760-322-2070, extension 403	<a href="mailto:jenness_mcbride@fws.gov">jenness_mcbride@fws.gov</a>
United States Army Corps of Engineers	915 Wilshire Blvd., Suite 930 Los Angeles, CA 90017-3401	Steven Estes	213-452-3660	
U.S. Bureau of Indian Affairs	1451 Research Park Drive #100 Riverside, CA 92507			
Federal Aviation Administration	15000 Aviation Boulevard Hawthorne, CA 90250	Margie Drilling – Planning for Riverside County	310-725-3628	<a href="http://www.faa.gov/contact/">http://www.faa.gov/contact/</a>
Federal Communications Commission	445 12th Street, SW Washington, DC 20554		888-225-5322	<a href="http://www.fcc.gov/contacts.html">http://www.fcc.gov/contacts.html</a>
<b>Other State Agencies</b>				
State Lands Commission	100 Howe Ave Suite 100 South Sacramento, CA 95825-8202	Ninette Lee	916-574-1869	<a href="mailto:leen@slc.ca.gov">leen@slc.ca.gov</a>

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**Table 2.2-2. Jurisdictional Agencies Associated with the West of Devers Upgrade Project**

Agency	Address	Contact Person	Phone	Email Address
California Independent System Operator	151 Blue Ravine Road Folsom, CA 95630	—		
California Dept of Fish and Wildlife	3602 Inland Empire Boulevard, Suite C-220 Ontario, CA 91764	Kimberly Freeburn Marquez	909-945-3484	<a href="mailto:kim.freeburn@wildlife.ca.gov">kim.freeburn@wildlife.ca.gov</a>
California Dept of Transportation, District 8	464 W. 4th Street San Bernardino, CA 92401	Dr. Raymond Wolfen - District Director	909-383-4631	
		Arfan Haidary Office of Encroachment Permits	909-383-7553	<a href="mailto:arfan_haidary@dot.ca.gov">arfan_haidary@dot.ca.gov</a>
California Dept of Toxic Substances Control	5796 Corporate Avenue Cypress, CA 90630	Maryam Tasnif-Abbasi Voluntary Clean-up Coordinator	714-484-5489	
	1001 I Street Sacramento, CA 95814-2828		800-728-6942	
State Historic Preservation Office	1416 9th Street, Room 1442-7 Sacramento, CA 95814	Milford W. Donaldson	916-653-6624	<a href="mailto:mwdonaldson@parks.ca.gov">mwdonaldson@parks.ca.gov</a>
	P.O. Box 942896 Sacramento, CA 94296-0001			
California Air Resources Board	1001 I Street P.O. Box 2815 Sacramento, CA 95812		916-322-2990	
State Water Quality Control Board	1001 I Street Sacramento, CA 95814	Bob Solecki	916-341-5464	<a href="mailto:rsolecki@waterboards.ca.gov">rsolecki@waterboards.ca.gov</a>
	73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260			
<b>Local and Regional</b>				
San Bernardino County	385 N. Arrowhead Avenue San Bernardino, CA 92415	Tom Hudson Director, Land Use Services	909-387-8311	<a href="mailto:luscutomerservice@lus.sbcounty.gov">luscutomerservice@lus.sbcounty.gov</a>

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**Table 2.2-2. Jurisdictional Agencies Associated with the West of Devers Upgrade Project**

Agency	Address	Contact Person	Phone	Email Address
County of Riverside	4080 Lemon Street P.O. Box 1440 Riverside, CA 92502-1629	Patricia Romo (Deputy Director of Engineering/Planning)	951-955-6740	
		Mike Lara Director of Building & Safety	951-955-2514	<a href="mailto:mlara@rctlma.org">mlara@rctlma.org</a>
	Desert Permit Assistance Center 38686 El Cerrito Road Palm Desert, CA 92211			
Western Riverside County Regional Conservation Authority	3403 10th St Ste 320, Riverside, CA 92501	Laurie Correa	951-955-9700	<a href="mailto:LDCORREA@wrcrca.org">LDCORREA@wrcrca.org</a>
Coachella Valley Conservation Commission	73-710 Fred Waring Drive, Suite 200 Palm Desert CA 92260	Jim Sullivan	760-346-1127	<a href="mailto:jsullivan@cvag.org">jsullivan@cvag.org</a>
Coachella Valley Water District	P.O. Box 1058 Coachella, CA 92236		760-398-2651	
South Coast Air Quality Management District	21865 Copley Dr. Diamond Bar CA 91765	Steve Smith	909-396-2000	<a href="mailto:ssmith@aqmd.gov">ssmith@aqmd.gov</a>
City of Palm Springs	3200 East Tahquitz Canyon Way Palm Springs, CA 92262	David J. Barakian, Director of Public Works, City Engineer	760-323-8253	
City of Banning	99 E. Ramsey Street Banning, CA 92220	Art Vela	951-922-3130	<a href="mailto:avela@ci.banning.ca.us">avela@ci.banning.ca.us</a>
City of Beaumont	550 East 6th Street Beaumont, CA 92223	Ernest Egger, Director of Planning	951-769-8518	<a href="mailto:eegger@ci.beaumont.ca.us">eegger@ci.beaumont.ca.us</a>
City of Colton	650 N. La Cadena Drive Colton, CA 92324	Mark Tomich Director of Development Services	909-370-5079	<a href="mailto:mtomich@ci.colton.ca.us">mtomich@ci.colton.ca.us</a>
City of Grand Terrace	22795 Barton Road Grand Terrace, CA 92313	Sandra Molina Director, Planning & Development Services	909-824-6621, ext. 225	<a href="mailto:smolina@grandterrace-ca.gov">smolina@grandterrace-ca.gov</a>
City of Redlands	35 Cajon Street P.O. Box 3005 Redlands, CA 92373	Donald Young, P.E. Engineering Manager	909-798-7585 ext. 6	<a href="mailto:dyoung@cityofredlands.org">dyoung@cityofredlands.org</a>

## 2 SCOPE OF THE PROGRAM

**Table 2.2-2. Jurisdictional Agencies Associated with the West of Devers Upgrade Project**

Agency	Address	Contact Person	Phone	Email Address
City of Calimesa	908 Park Avenue Calimesa, CA 92320	Margaret Monson Public Works Director	909-795-9801 ext.	<a href="mailto:pworks@cityofcalimesa.net">pworks@cityofcalimesa.net</a>
City of Loma Linda	25541 Barton Road Loma Linda, CA 92354	Konrad Bolowich Deputy Public Works Director	909-799-2895	<a href="mailto:kbolowich@lomalinda.ca.gov">kbolowich@lomalinda.ca.gov</a>
<b>Other Utilities</b>				
Southern California Gas Company	10927 Deer Valley Road Yucaipa, CA 92399			
Metropolitan Water District	P.O. Box 54153 Los Angeles, CA 90054-0153		213-217-6000	<a href="mailto:EngineeringSubstructures@mwdh2o.com">EngineeringSubstructures@mwdh2o.com</a> <a href="mailto:RealEstateServices@mwdh2o.com">RealEstateServices@mwdh2o.com</a>
BNSF Railroad	2650 Lou Menk Drive Fort Worth, TX 76131-2830			
Kinder Morgan (El Paso) Natural Gas Pipeline				
Questar Southern Trails Pipeline Company				

### 3 ROLES AND RESPONSIBILITIES

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SCE is responsible for implementing and maintaining all mitigation measures and APMs, and for obtaining and complying with all required permits. The utility is responsible for ensuring that its agents and contractors comply with the MMCRP. SCE also is responsible for satisfying requests from jurisdictional agencies and will notify and copy the CPUC on all correspondences related to final approvals and verifications for the project if not otherwise copied on the correspondence.

Standards for successful mitigation are implicit in some mitigation measures, such as obtaining non-discretionary permits or avoiding a specific impact entirely. Additional resource avoidance or impact minimization conditions may be imposed by applicable agencies with jurisdiction through their discretionary permit processes.

**IMPORTANT:** SCE will inform the CPUC Project Manager in writing of mitigation measures that are not or cannot be successfully implemented. While the CPUC recognizes the need for flexibility post-decision in response to changed circumstances, it believes changes should be the exception to the rule, and it intends to ensure that any proposed change is subject to rigorous standards. Consequently, some requested changes may qualify for the process set forth in the MMCRP for minor project changes (see Section 4.6); others may require the submittal of a Petition for Modification (PFM) pursuant to CPUC Rules of Practice & Procedure, Rule 16.4(a).

The CPUC, as the CEQA Lead Agency, is responsible for ensuring that all mitigation measures and APMs are implemented in a timely fashion as specified, and that the CPUC EM verifies SCE's compliance with mitigation measures, APMs, and conditions of permits issued by other agencies. Other jurisdictional agency representatives may visit construction areas at any reasonable and safe time, and may require information regarding the status of compliance with particular mitigation measures or permits. All visitors, including regulatory agency personnel, must sign-in with the job site safety representative and receive the site safety briefing before entering work sites. Site visits to active substations will be coordinated with the SCE EPM and/or substation site representative ahead of time. Additional information on communication protocols is presented in Section 4.

#### 3.1 SCE COMPLIANCE PERSONNEL

SCE project personnel and SCE's contractors are responsible for implementing all project mitigation measures, APMs, permit conditions, and the MMCRP. It is SCE's responsibility to comply with project requirements, plan construction activities in a manner that meets these requirements, document compliance activities and the results of mitigation, and implement the MMCRP. The compliance personnel titles, and roles and responsibilities presented below represent a preliminary approach for the project. The titles for project personnel and their associated roles and responsibilities are subject to change. The project organization charts included in Appendix G, present personnel assigned to the roles, and relationships between the

### 3 ROLES AND RESPONSIBILITIES

roles. If/when the organization structure changes, the organization charts will be updated. In the descriptions that follow, the prefix “SCE” may refer to SCE employees or SCE contractors such as third-party consultants.

#### 3.1.1 SCE Environmental Project Manager

The SCE Environmental Project Manager (EPM) shall be the lead SCE representative responsible for implementing environmental requirements and the MMCRP as a representative of the owner (SCE). The SCE EPM’s responsibilities include:

- Directing the development and implementation of preconstruction environmental mitigation, planning, permitting, and compliance activities; environmental inspection program; and environmental training.
- Ensuring compliance with and monitoring compliance of mitigation and other environmental requirements during construction.
- Monitoring and reporting post-construction restoration and compensation requirements.
- Communicating environmental requirements to the SCE Compliance Team and Construction Managers
- Communicating with the CPUC Monitoring Team regarding environmental requirements, construction needs, and construction schedule changes
- Reporting the effectiveness of mitigation and regularly submitting required documentation and notifications to CPUC
- Providing leadership to correct any issues with environmental compliance

The SCE EPM will be an SCE employee.

#### 3.1.2 Barnard Environmental Project Manager

Barnard will designate an EPM responsible for overseeing compliance with the APMs, MMs, and other project requirements. The Barnard EPM will be responsible for managing contracts with subcontractors providing environmental services such as compliance monitoring. The Barnard EPM will also act as a liaison between environmental and construction staff. The Barnard EPM’s responsibilities include:

- Ensuring compliance with mitigation and other environmental requirements during construction.
- Communicating environmental requirements to Construction Project Managers, Project Engineers, Superintendents, and Construction Foremen

### 3 ROLES AND RESPONSIBILITIES

- Communicating with the CPUC Monitoring Team regarding environmental requirements, construction needs, and construction schedule changes
- Providing oversight of environmental monitoring
- Coordinating with construction management personnel
- Monitoring and reporting post-construction restoration and compensation requirements.
- Resolving compliance issues
- Providing leadership to correct any issues with environmental compliance
- Identifying project changes requiring Global Information System (GIS) updates to address new work areas

The EPM will be filled by a Barnard staff member.

#### 3.1.3 Subcontractor Environmental Project Manager

This position will be filled by an environmental subcontractor to Barnard. The subcontractor EPM will work with the SCE and Barnard EPMs to coordinate the environmental compliance aspects of the project and share many of the same responsibilities. The Subcontractor EPM will supervise the subcontract staff. The EPM will be responsible for managing other environmental subcontractors providing environmental services such as compliance monitoring. The Subcontractor EPM's responsibilities include:

- Ensuring project compliance with environmental requirements and mitigation during construction.
- Assisting in communicating environmental requirements to Construction Managers.
- Communicating with the CPUC Monitoring Team regarding environmental requirements, construction needs, and construction schedule changes
- Providing oversight of applicable mitigation requirements
- Providing oversight of environmental monitoring
- Coordinating with construction management personnel
- Monitoring and report post-construction restoration and compensation requirements.
- Resolving compliance issues
- Providing leadership to correct any issues with environmental compliance efforts

The Subcontractor EPM will be filled by Subcontract staff (Jacobs).

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### 3.1.4 Subcontractor Environmental Coordinator(s) (EC)

Barnard will designate a Subcontractor Environmental Coordinator (EC) or multiple subcontractor ECs to assist with implementation of the environmental requirements and the MMCRP. The roles and responsibilities of the Subcontractor EC(s) consist of those that are delegated by the SCE EPM, Barnard and/or Subcontractor EPMs. In addition to sharing the delegated roles and responsibilities of the SCE EPM, the roles and responsibilities of the Barnard EC(s) may include:

- Providing oversight of applicable mitigation requirements
- Coordinating with CPUC and compliance personnel
- Providing oversight of environmental monitoring
- Coordinating with subject matter experts (SME)
- Coordinating with field leads
- Coordinating with construction management personnel
- Communicating and resolving elevated compliance issues with Barnard, SCE, and the CPUC Monitoring Team
- Coordinating project changes with Barnard, SCE, and the CPUC Monitoring Team in the form of Temporary Work Space, Minor Project Refinement, and Project Modifications
- Coordinating mitigation plan changes with Barnard, SCE, appropriate agencies, and the CPUC Monitoring Team
- Coordinating and preparing Compliance Documentation Tables

The EC role will be filled by consultant staff (Jacobs). The number of ECs may change over the course of the project depending on the levels of construction, as determined by the Barnard EPM, in coordination with subcontractor staff.

### 3.1.5 Subcontractor Lead Biologist

The Lead Biologist will be responsible for compliance with the biological APMs, MMs, permit conditions, other biological project requirements, and mitigation plan implementation. The Lead Biologist will be responsible for managing all biological staff and will provide project history and subject matter expertise. The Lead Biologist will directly manage compliance with biological permits (e.g., Biological Opinion and Incidental Take Permit, Multiple Species Habitat Conservation Plans) and provide support and oversight for the Compliance Leads, Field Leads, and Field Monitors. The Lead Biologist will also be responsible for making recommendations regarding the monitoring approach and mitigation measure implementation. The Lead Biologist



### 3 ROLES AND RESPONSIBILITIES

will be a point of contact for agency staff and responsible for working to resolve disputes. Other Lead Biologist responsibilities include:

- Providing oversight of applicable mitigation requirements
- Coordinating with CPUC, Wildlife Agencies, and compliance personnel
- Providing oversight for biological monitoring
- Coordinating with subject matter experts (SME)
- Coordinating with field leads
- Coordinating with construction management personnel
- Resolving compliance issues in coordination with SCE EPM, Barnard EPM, and regulatory agencies
- Developing recommendations for compliance processes and protocols

The Lead Biologist role will be filled by subcontractor staff (Jacobs).

#### **3.1.6 Subcontractor Compliance Leads (CL)**

Barnard will designate two compliance leads collectively responsible for oversight of compliance and management of field staff. The Biological CL will be responsible for oversight of compliance with the biological APMs, MMs, and other project requirements. The Environmental CL will be responsible for compliance with other resource area APMs, mitigation measures, and other project requirements. Each will work together to ensure compliance, to coordinate and manage field staff, and to resolve issues. Other Subcontractor CL responsibilities include:

- Providing oversight of applicable mitigation requirements
- Coordinating with CPUC and compliance personnel
- Providing oversight of environmental monitoring
- Coordinating with subject matter experts (SME)
- Supervising/coordinating with field leads
- Coordinating with construction management personnel
- Resolving compliance issues
- Issuing holds on construction Communicating environmental requirements to the SCE Compliance Team and Construction Managers

### 3 ROLES AND RESPONSIBILITIES

The CL positions will be filled by subcontractor staff (Jacobs)

#### 3.1.7 Subcontractor Environmental Field Leads (FL)

Subcontractor FLs will oversee the day-to-day environmental monitoring activities during construction. In addition, Subcontractor FLs will provide day-to-day direction to the Field Monitors and specialty field monitors and serve as the liaison between Barnard Site Foremen, Subcontractor management staff, and field staff. Roles and responsibilities for Subcontractor FLs include:

- Coordinating with Barnard construction management
- Scheduling field staff to support anticipated construction
- Providing day-to-day direction, oversight, and mentoring of Subcontractor Field Monitors and specialty monitors based on Subcontractor SME guidance
- Clarifying mitigation requirements and CPUC/BLM or agency/permit conditions to Subcontractor field staff
- Reviewing and providing QA/QC of daily monitoring reports
- Preparing weekly summary reports
- Communicating with the CPUC, BLM, and regulatory agency personnel in the field, in coordination with Subcontractor ECs, and SMEs.
- Providing immediate notification of non-compliance or place 1-hour holds on construction, in coordination with Subcontractor SMEs, CLs, and ECs.
- Conveying work stoppage information such as delay time
- Participating in tailboard meetings to focus Barnard construction and monitors on issues or resources

The Subcontractor FL positions will be staffed by subcontractor biologists with compliance monitoring experience and familiarity with all APMs, MMs, and permit conditions, including those not biology-specific. The number of Subcontractor FLs may change over the course of the project depending on the levels of construction.

#### 3.1.8 Barnard Compliance Field Monitors (FM)

Subcontractor Compliance FMs shall work closely with construction personnel in the field to implement mitigation and perform, or oversee, required monitoring tasks. The subcontractor FMs shall be the primary field employees responsible for monitoring day-to-day environmental compliance. Subcontractor FMs will primarily be biological monitors trained to monitor compliance with biological APMs, MMs, and permit conditions, as well as measures addressing other resources (e.g., SWPPP, fugitive dust) with the ability to coordinate with specialty monitors (e.g., cultural, tribal, paleontological) when needed.

The subcontractor FMs responsibilities include:

- Understanding environmental project requirements and construction needs

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- Taking direction from the SCE EPM, Subcontractor EC(s), Subcontractor CL, and Subcontractor FLs
- Supporting construction staff to ensure work is conducted in compliance with environmental requirements
- Conducting, or overseeing, monitoring activities specified in project MMs, APMs, and permit conditions
- Implementing the MMCRP
- Participating in daily tailboards
- Conducting preconstruction surveys/sweeps of the construction site and areas around equipment
- Verifying staking, flagging, or marking sensitive resources in the field
- Relocating biological resources under direction of qualified biologists/specialty monitors
- Placing 1-hour holds on construction, as needed
- Providing mitigation guidance as needed
- Documenting non-compliance issues
- Coordinating with the FL, CLs, EC(s), SMEs, Barnard EPM, and construction management, as needed
- Preparing daily monitoring reports
- Determining the effectiveness of mitigation and reporting whether adjustments need to be made to the Compliance Team

Subcontractor FMs will have the authority to place a 1-hour hold on work activities if a violation is taking place or is eminent, to investigate potential discoveries, or to provide MM guidance. Once a construction hold has begun, the subcontractor FM will communicate with the Subcontractor FLs, Subcontractor CL, EC(s), and EPMs. The Barnard EPM, in consultation with the environmental staff, will communicate to construction workers regarding additional estimated time delays (if any) and the avoidance measures (i.e., flagged Environmentally Sensitive Area or construction site restriction). The FL will also communicate the expected time delay, avoidance measures, or resolution to the FMs.

The Subcontractor FM positions will be staffed by Subcontractor environmental subconsultants.

#### **3.1.9 Subcontractor Subject Matter Experts (SMEs)/Specialty Monitors**

Subcontractor SMEs will establish and manage the mitigation measure requirements and regulatory compliance for their areas of expertise (e.g., biology, cultural). Subcontractor SMEs

### 3 ROLES AND RESPONSIBILITIES

will be responsible for the management and delivery of final resource work products, resource-specific monitoring in support of construction schedules, and permit compliance. They will review their respective technical and reporting documents (i.e., survey reports, monitoring reports) and will submit final technical and reporting documents to the appropriate Subcontractor EC(s), and Subcontractor Management Team who will provide quality assurance/quality control (QA/QC) and approval prior to submittal of the finalized drafts to the Barnard and SCE EPMs. Roles and responsibilities for Subcontractor SMEs include:

- Coordinating compliance issues with Barnard, SCE, and the CPUC Monitoring Team.
- Coordinating and consulting with resource agencies
- Providing supporting data requirements for Project variances and agency permits
- Reviewing regulatory documents that may require implementation of conditions
- Managing applicable mitigation requirements
- Coordinating with the Barnard EPM and/or appropriate Subcontractor ECs, CLs, FLs, FMs, and Specialty Monitors
- Providing technical support for Barnard Management Team and field staff.
- Reviewing and providing QA/QC of monitoring reports and compliance documentation.
- Coordinating surveys and reports
- Advising Barnard Management Team regarding compliance strategies and implementation of mitigation plan requirements.

Many Subcontractor SMEs will also function as Subcontractor Specialty Monitors (e.g., Authorized and Qualified Biologists), who shall be assigned as needed to perform monitoring tasks when project mitigation measures, APMs and permit conditions require a specifically qualified monitor to protect designated resources. The Subcontractor Specialty Monitors have the authority to work with construction personnel to redirect any construction activities associated with the project, when it is safe to do so, if the activity poses an imminent threat or puts a sensitive resource at undue risk beyond that already permitted.

SCE Specialty Monitors may include Authorized/Qualified Biologists as described in the BO and ITP for the project; approved avian biologist restoration specialist; cultural, tribal, and/or paleontological monitors (as needed); and other personnel with experience and qualifications required for specific resources. A subcontractor FM may possess the necessary experience, expertise, and agency approvals and/or may work in cooperation with Specialty Monitors staffed independent of the subcontractor FM role.

The Subcontractor SME/Specialty Monitor positions may be staffed with third-party consultants and/or construction contractor environmental subcontractor staff.

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### 3.2 BARNARD CONSTRUCTION MANAGEMENT TEAM

#### 3.2.1 Barnard Construction Project Manager(s)

Barnard Construction Project Managers will oversee the activities of all EPC construction personnel. Barnard Construction Manager responsibilities include:

- Ensuring compliance with SCE specifications, project MMs, APMs, permit conditions, MMCRP policies, construction contracts, and applicable codes
- Communicating construction needs and schedule changes to the SCE Compliance Team, via weekly look ahead schedules, plan of the day schedules, and email updates to the ECs, Compliance Leads, FLs, SCE EPM, and CPUC EMs, as changes occur throughout the day and evening.
- Communicating project design changes so that updates to the SCE GIS database can be made by the Barnard Subcontractor GIS team, for Barnard requested changes. SCE requested project changes will be updated in the SCE GIS database by SCE GIS staff, and communicated to the Barnard Subcontractor GIS team. Monthly updates will then be submitted to the CPUC Environmental Team.
- Regularly facilitating field meetings with construction and environmental staff

Barnard's Project Manager, will be onsite full time and will share overall responsibility for the successful execution of the project with the Construction Superintendent. He will oversee project controls, engineering management, subcontractor management, quality control, scheduling, payment applications, and contract management. The Barnard Project Manager will interface with and be directly responsible and accountable to SCE's representative.

#### 3.2.2 Barnard Construction Superintendent

Barnard's Construction Superintendent, will be onsite full time and will share overall responsibility for the successful execution of the project with the Project Manager. He will oversee all field work, including supervising Barnard foremen and crews; scheduling and tracking of subcontractors and suppliers; daily cost controls; acquisition of equipment, material and labor. The Superintendent will supervise implementation of all safety, quality control, environmental, drug testing, or other project-specific programs.

#### 3.2.3 Barnard Safety Manager & Fire Marshal

The Project Safety Manager/Fire Marshal will be responsible for developing and implementing the project safety plan. Project Safety Manager/Fire Marshal responsibilities also include conducting safety orientation and training; ensuring compliance with project safety plans, managing project safety incidents; and coordinating project safety meetings. The Project Safety Manager/Fire Marshal will conduct field/facility investigations and communicate with Barnard's Project Manager and SCE's representative regarding incidents and injuries.

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### 3.2.4 Barnard Project Engineers

Barnard's Project Engineers will perform a wide range of engineering management functions, including cost control, scheduling, outage coordination, progress reporting, quantity tracking, purchasing, subcontractor coordination, quality control, and document control. A Project Engineer will be assigned to each key scope component, including structures, conductor installation, civil construction, and environmental/SWPPP. The Engineers will manage these work scopes as their own project-within-a-project.

### 3.2.5 Barnard Construction Foremen

On-site construction leadership will be the responsibility of the Crew Foreman. The Crew Foreman shall be responsible for all construction activities at individual site(s) under the direction of Barnard construction management. The Crew Foreman will also be responsible for conducting day-to-day project activities in compliance with MMs and APM requirements, permit conditions, and the MMCRP, as directed by the environmental management team. Key environmental roles of the Barnard Crew Foreman are to plan construction activities around environmental requirements, as well as to identify and report potentially infeasible challenges to construction to the environmental management team.

### 3.2.6 Barnard Construction Workers

Construction workers who enter the project site are responsible for following all MMs and APM requirements, permit conditions, and the MMCRP. Construction workers are responsible for attending required environmental training(s) applicable to their position, and directing any questions to the Barnard Construction Project Managers, Barnard Project Engineers, Barnard Superintendents, Barnard Crew Foremen, Subcontractor CLs, FLs, FMs and Specialty Monitors.

### 3.2.7 Subcontractors

Many of the construction tasks will be performed by construction subcontractors. Under the direction of Barnard, subcontracted construction crews are responsible for complying with MMs and APM requirements, permit conditions, and the MMCRP. The following table presents the primary subcontractors that will be used on the project.

**Table 3.2-1. Main Construction Subcontractors**

<b>Role</b>	<b>Name</b>
Lattice Tower and Tubular Steel Pole Foundations	CJ Drilling, Inc.
Civil Improvements, Site Restoration, BMP Installation and Maintenance	Power Grade, Inc.
Subtransmission, Distribution and Telecommunications Infrastructure Modifications	Hot Line Construction, Inc.

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### 3.3 SCE CONSTRUCTION MANAGEMENT TEAM

#### 3.3.1 SCE Construction Managers

SCE Construction Managers will oversee substation and telecommunication construction activities associated with SCE self-performance work. Responsibilities of SCE Construction Managers include:

- Ensuring compliance with SCE specifications, project MMs, APMs, permit conditions, Project Plans, MMCRP policies, construction contracts, and applicable codes
- Communicating construction needs and schedule changes to the SCE Compliance Team, via weekly look ahead schedules, plan of the day schedules, and email updates to the ECs, Compliance Leads, FLs, SCE EPM, and CPUC EMs, as changes occur throughout the day and evening.
- Communicating project design changes so that updates to the SCE GIS database can be made for SCE requested changes. SCE requested project changes will be updated in the SCE GIS database by SCE GIS staff. Monthly updates will then be submitted to the CPUC Environmental Team.
- Regularly facilitating field meetings with construction and environmental staff

SCE's Construction Managers oversee project controls, engineering management, subcontractor management, quality control, scheduling, payment applications, and contract management.

### 3.4 CPUC MONITORING TEAM

#### 3.4.1 CPUC Project Manager (PM)

The CPUC PM has overall responsibility for ensuring that MMs and APMs are implemented as adopted by the CPUC. The CPUC PM will determine the effectiveness of the MMCRP based on the implementation of the measures and APMs included in the mitigation monitoring tables included as Attachments C, D, and E. The CPUC delegates field monitoring and reporting responsibilities to third-party EMs during construction and will oversee their work through telephone calls and review of daily and weekly status reports. The CPUC PM will be notified of all noncompliance situations and may suggest measures to help resolve the issue(s).

**IMPORTANT:** The CPUC PM will issue NTPs for construction of each work package identified by SCE. However, the CPUC's NTP does not authorize construction to start if additional approvals are required from other agencies and such approvals have not been obtained at the time of issuance of an NTP. *No construction requiring a permit may occur on other jurisdictional lands without specific approval by those agencies.*



## 3 ROLES AND RESPONSIBILITIES

### 3.4.2 CPUC Environmental Monitor (Aspen)

SCE has primary responsibility for ensuring that construction activities are conducted in accordance with approved Project mitigation measures, APMs, compliance plans, and permit conditions. The role of the CPUC third party monitor (Aspen) is to ensure that compliance is being achieved and to document compliance using verbal and written communications.

The overall monitoring program will be administered under the direction and oversight of the CPUC PM. The CPUC will delegate monitoring and reporting responsibilities to a third-party monitor (Aspen). The number of third-party monitors (CPUC EMs) and frequency of site inspections will depend on the number of concurrent construction activities and their locations with respect to sensitive resources and land uses, and compliance with Project mitigation measures, APMs, and permit conditions during construction.

- **Aspen Monitoring Manager.** The Monitoring Manager supervises Aspen's CPUC EMs, determines the appropriate inspection frequency, and is responsible for weekly report preparation. The Monitoring Manager also serves as the main point of contact with the CPUC PM for major compliance matters.
- **Aspen Project Liaison.** The Project Liaison provides a direct line of contact with CPUC management and legal, as well as SCE, regarding public complaints and other issues. This person facilitates the development of new procedures to address new issues as they arise.
- **Aspen CPUC Lead Environmental Monitor (LEM).** The CPUC LEM will oversee day-to-day monitoring activities of the CPUC EMs in the field, and will be the primary point of contact with in-field agency personnel. The CPUC LEM will coordinate preparation of draft weekly reports and NTP and Variance/DNA field validations, and also serve as an EM.
- **Aspen CPUC Environmental Monitors (CPUC EMs).** CPUC EMs will conduct on-site monitoring and will primarily communicate with SCE's FLs when information is needed or issues are observed. Cooperation between the CPUC EMs and the Barnard Subcontractor CLs, FLs, FMs, and SME/Specialty Monitors is also encouraged. The CPUC EMs will be the primary point of contact with in-field agency personnel on behalf of CPUC. CPUC EMs will be an integral part of the project team and will stay apprised of construction activities and schedule changes, and will monitor construction activities for compliance with project mitigation measures, APMs, compliance plans, and permit conditions. The CPUC EMs will document compliance through field notes and will prepare weekly reports documenting construction activities, progress, and compliance. The CPUC EMs shall note any issues or problems with implementation of mitigation/APM/permit conditions, notify the appropriate designated project members, and report problems to the CPUC PM.

**IMPORTANT:** The enforcement authority of the CPUC EM in the field is limited to conditions posing imminent safety or resource endangerment concerns at a work location. The CPUC EM is authorized to work with project personnel to temporarily stop work under these conditions if



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it is safe to do so. SCE will address the identified issues. Only the CPUC PM has authority to shut down the project completely.

**Table 3.4-1. Key CPUC Monitoring Team Personnel**

<b>Role</b>	<b>Name</b>
CPUC Project Manager	Billie Blanchard
Aspen Project Manager	Vida Strong
Aspen Lead Environmental Monitor	Jenny Slaughter
Aspen Environmental Monitor	Jamie Miner

### 3.5 JURISDICTIONAL AGENCIES

Personnel from jurisdictional agencies identified below may periodically visit the Project site to verify compliance or to request information from SCE regarding compliance with laws, regulations, and Project permits identified in Table 2.2-1. All visitors, including regulatory agency personnel, must sign-in with the job site safety representative and receive the site safety briefing before entering work sites. Site visits to active substations will be coordinated with the SCE EPM and/or substation site representative ahead of time. SCE is responsible for responding to requests from jurisdictional agencies and submitting permits and authorizations to CPUC per Project requirements such as MMs, APMs, and Project Plans. SCE shall provide CPUC with documentation (i.e., email correspondence, letters, and/or memoranda) related to final agency approvals for the Project if CPUC is not directly involved with the coordination effort and the agency approval is tied to mitigation measures, APMs, or Project Plans. SCE shall also provide any copies of permit amendments or modifications to the CPUC and notify the CPUC of any proposed changes in permit conditions. In addition, CPUC may contact jurisdictional agencies at any time regarding the Project and to clarify agency requirements, permit conditions, or approvals relating to their jurisdiction, as needed. Prior to CPUC communicating with jurisdictional agencies, CPUC will notify the SCE PM or SCE EPM of the CPUC's questions regarding the jurisdictional agency's requirements, permit conditions, or approval and the intention to contact the agency. If appropriate, the CPUC may request that SCE seek the requested clarification or invite SCE to participate in the discussion in a manner that is mutually convenient with all parties; however, the CPUC retains the authority to coordinate directly with other agencies regarding the Project and permit conditions or plan review comments.

#### 3.5.1 Bureau of Land Management

As the NEPA Lead Agency, BLM is responsible for ensuring that mitigation measures are implemented on BLM land. BLM will work with the CPUC and SCE in monitoring mitigation during construction of the Project and may use the CPUC's environmental contractor or monitoring staff for compliance monitoring on its lands. BLM's resource specialists may also have a field presence for Project inspection and to review and resolve on-the-ground issues that

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may arise on BLM land. No activities may occur on BLM-managed lands without BLM approval. BLM will be notified by the CPUC EM of any compliance issues or proposed project changes on BLM lands.

- **BLM Field Manager.** The BLM Palm Springs/South Coast Field Manager is the authorized officer to make BLM decisions for this Project. The BLM Field Manager will issue all authorizations for the use of BLM land.
- **BLM Project Manager.** The BLM Project Manager will report to the BLM Field Manager and will coordinate the implementation of the Project among BLM staff at the field, district, and state office levels. The BLM Project Manager is the primary point of contact with SCE, as well as governmental agencies, for review of documents, reports, mitigation progress, and Project planning.
- **BLM Resource Specialists.** Resource specialists will be involved with implementation of this Project, and they will assist the BLM Project Manager and EMs with evaluation of conditions and Project status relative to mitigation requirements or other stipulations. BLM resource specialists will include archaeologists, biologists, geologists, and other staff as required.

#### 3.5.2 U.S. Bureau of Indian Affairs

The Proposed Project would cross approximately 8 miles of the reservation Trust Lands of the Morongo. Based on the SCE-Morongo ROW agreement, approximately 3 miles of existing WOD ROW would be abandoned and replaced with a new 3-mile alignment. SCE has applied to the BIA for the grant of ROW across the new 3-mile alignment and Morongo would consent to SCE's application<sup>2</sup> for a new 50-year ROW Agreement; ROW grant application under review. The Morongo will monitor lands within the boundaries of their reservation during construction.

#### 3.5.3 United States Army Corps of Engineers (USACE)

Section 404 of the Clean Water Act (CWA) (33 U.S.C. Section 1251 et seq., formerly the Federal Water Pollution Control Act of 1972) authorizes the USACE to regulate the discharge of dredged or fill material to the waters of the United States and adjacent wetlands associated with the approved Project. The USACE issues individual site-specific or general (nationwide) permits for such discharges. USACE issuance of a Section 404 permit triggers the requirement that a Section 401 certification must also be obtained.

The CPUC EMs are familiar with the USACE permit conditions and check for implementation in the field. If an issue arises during construction, the CPUC EMs, along with SCE, will notify the USACE representative so that he/she can take action. In addition, the USACE representative will be asked if he/she would like to be on the weekly report distribution. The Section 404 Nationwide Permit was approved and certified on February 28, 2018.

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<sup>2</sup> Pursuant to 25 U.S.C. § 323.

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#### 3.5.4 United States Fish and Wildlife Service (USFWS)

Under Section 7 of the Federal Endangered Species Act (FESA) of 1973, as amended (16 U.S.C. 1531 et seq.) and the Fish and Wildlife Coordination Act, BLM has consulted with USFWS. As part of the FESA Section 7 consultation process, USFWS issued a Biological Opinion (BO) on December 23, 2016. The BO confirms that the WOD Project is consistent with the requirements of the Western Riverside and Coachella Valley Multiple-Species Habitat Conservation Plans (WR-MSHCP and CV-MSHCP, respectively – see Sections 3.3.6 and 3.3.7 below). For project components and activities located outside the two MSHCP areas (i.e., location within BLM lands, Morongo Reservation lands, or anywhere in San Bernardino County), the BO identifies a series of Conservation Measures. SCE will implement requirements in the BO, and the SCE SME will ensure compliance with the BO, as applicable, for the entire project.

Where conservation measures relate to construction activities the CPUC EMs will ensure that the conservation measures in the BO are implemented. If a potential violation occurs during construction, the CPUC EMs will notify the USFWS representative(s) (as well as the CPUC and BLM PMs) so that appropriate action can be taken. Consistent with Reporting Requirements specified in the BO, USFWS representatives will also be consulted by the CPUC PM if an issue arises relevant to an adopted conservation measure to protect federally listed species, or if any species addressed in the BO are affected during construction in a manner not anticipated in the BO. In addition, the USFWS representative(s) will be included in the weekly report distribution. Long-term monitoring during operations and maintenance will be addressed through consultation and a plan with USFWS.

The USFWS implements the Migratory Bird Treaty Act (MBTA, 16 USC Sections 703 711) and Bald and Golden Eagle Protection Act (BGEPA, 16 USC Section 668). The MBTA prohibits take of any migratory bird, including eggs or active nests, except as permitted by regulation (e.g., licensed hunting of waterfowl or upland game species). The BGEPA prohibits the take, possession, and commerce of bald eagles and golden eagles. Under the BGEPA and subsequent rules published by the USFWS, “take” may include actions that injure an eagle, or affect reproductive success (productivity) by substantially interfering with normal behavior or causing nest abandonment. The USFWS may authorize incidental take of bald and golden eagles for otherwise lawful activities, although no take is anticipated and not such authorization is applicable for this project.

SCE, in coordination with USFWS, CDFW, BLM, and CPUC, developed the Nesting Bird Management Plan for the WOD Project, including a series of nest surveys, buffers, and monitoring requirements (see Attachment F). MMs specified in the FEIR and ROD will ensure that no bald or golden eagles are taken during project construction. The CPUC EMs are familiar with the NBMP conditions and MMs, and will ensure implementation in the field. If an issue arises during construction, the CPUC EMs will notify the USFWS representative (as well as the CPUC, BLM, and CDFW PMs) so that appropriate action can be taken. In addition, the USFWS representative will be included in the weekly report distribution.

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### 3.5.5 California Department of Fish and Wildlife (CDFW)

The CDFW has jurisdiction over the conservation, protection, and management of California's fish, wildlife, native plants, and the habitats necessary for their sustenance. CEQA lead agencies have a legal obligation to consult with CDFW as to their projects' impacts on biological resources.

CDFW issues California Endangered Species Act (CESA) Incidental Take Permits (ITP) pursuant to Fish and Game Code Sections 2081(b) and 2081(c), and California Code of Regulations, Title 14, Subdivision 3, Chapter 6, Article 1, beginning with Section 783. CESA prohibits the take of any species of wildlife designated as an endangered, threatened, or candidate species by the Fish and Game Commission. However, the Department may authorize the take of such species by permit if the conditions set forth in Fish and Game Code Sections 2081(b) and 2081(c) are met. (See also California Code of Regulations, Title 14, Section 783.4.) SCE has filed an application for a Section 2081 ITP which is expected to be received by July 2017.

The California Fish and Game Code §3511, §4700, §5050, and §5515 provide for the highest level of protection for mammals, birds, reptiles and amphibians, and fish listed as Fully Protected. Designated species may not be taken or possessed at any time. CDFW cannot issue permits that authorize the "take" of any fully protected species, except for certain circumstances such as scientific research and live capture and relocation to protect livestock.

Three statutes outside of CESA provide protection for birds, nests, and eggs: Fish and Game Code §3503 prohibits the taking, possession, or needless destruction of nest, eggs, and birds, and Fish and Game Code §3503.5 prohibits the taking, possession, or destruction of birds of prey (*Falconiformes* and *Strigiformes*) or their nests and eggs; and §3503 provides for the State's adoption of the MBTA's provisions (above).

CESA's protection for plants is subject to the Native Plant Protection Act (NPPA, §§ 1900-1913). Prior to enactment of CESA, California adopted the NPPA. CESA (described above) generally replaces the NPPA for plants originally listed as endangered under the NPPA. However, plants originally listed as rare retain that designation, and take is regulated under provisions of the NPPA. The California Fish and Game Commission adopted revisions to the NPPA allowing CDFW to issue incidental take authorization for listed rare plants, effective January 1, 2015. No state-listed rare plants are expected to be affected by the project.

The CDFW will require a Streambed Alteration Agreement, pursuant to Section 1600 *et seq.* of the Fish and Game Code, prior to the commencement of any activity that will substantially change the bed, channel, or bank (which may include associated riparian resources) of a river, stream or lake; use materials from a streambed; and/or result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. The CDFW's issuance of a Streambed Alteration Agreement for a project that is subject to CEQA requires CEQA compliance actions by the Department as a Responsible Agency. As a Responsible Agency under CEQA, CDFW may consider the local

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jurisdiction (Lead Agency's) CEQA documentation for the project. SCE filed the application for a 1602 permit in March 2017.

The CPUC EMs will coordinate with the CDFW, as needed during construction. The CPUC EMs are familiar with the CDFW permit conditions and will ensure implementation in the field. If an issue arises during construction, the CPUC EMs will notify the CDFW representative (as well as the CPUC and BLM PMs) so that appropriate action can be taken. In addition, the CDFW representative will be included in the weekly report distribution.

#### **3.5.6 Western Riverside County Regional Conservation Authority**

The Western Riverside County Regional Conservation Authority (RCA) is a joint regional authority responsible for implementation of the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) which covers lands west of the Morongo Reservation and east of the San Bernardino- Riverside County Line. The RCA, with concurrence from CDFW and USFWS, completes a Participating Special Entity Review and, for projects found to be consistent with the MSHCP, issues a Certificate of Inclusion (COI). The COI may include conditions to minimize or mitigate resource impacts, including mitigation lands and avoidance requirements for certain species, best management practices, and construction guidelines. The COI was issued to SCE in March 2017.

#### **3.5.7 Coachella Valley Conservation Commission**

The Coachella Valley Conservation Commission (CVCC) is responsible for implementing the Coachella Valley MSHCP which covers private lands east of the Morongo Reservation. Similar to the Western Riverside MSHCP, the CVCC with concurrence from CDFW and USFWS, reviews of the project for MSHCP consistency (through a Joint Project Review process) and, for projects found to be consistent with the MSHCP, issues a Certificate of Inclusion (COI). If needed to ensure consistency, the CVCC, wildlife agencies, and applicant may identify additional project conditions. The COI was issued to SCE in March 2017.

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This section addresses MMCRP procedures for personnel identified in Section 3 that shall be implemented prior to, during, and following construction to facilitate successful implementation and documentation of Project requirements. Procedures in this section include general communication guidelines, standard CPUC practices, and documentation tools developed from experience with past CPUC projects that involved mitigation monitoring oversight.

#### 4.1 COMMUNICATION GUIDELINES

Good communication is essential to successful implementation of an environmental mitigation compliance program. To avoid Project delays, CPUC and SCE environmental and Barnard construction representatives will interact regularly and maintain professional, responsive communications at all times. SCE and Barnard environmental representatives will coordinate closely with CPUC EMs throughout the monitoring effort to ensure that issues are addressed and resolved in a timely manner. To that end, this section provides a communication protocol for the timely and accurate dissemination of information to all levels of the Project regarding surveys, plans, mitigation measures, construction activities, non-compliance incidents, and planned or upcoming work.

To ensure that the CPUC EMs can get accurate and timely information on ongoing surveys, construction work, non-compliance incidents, and construction schedules, the following protocols have been established:

- The CPUC EMs' primary point(s) of contact in the field will be the Subcontractor FLs. If not available, the Subcontractor CL or EC(s) will be the point of contact, followed by the SCE EPM if the Subcontractor EC(s) are not available.
- The Subcontractor FLs will make every effort to inform CPUC EMs of all current and planned survey and construction activity, including status of permits and activity locations, in a timely manner.
- Barnard will provide look ahead schedules on a daily basis (plan of the day). Additionally, similar information will be discussed and provided during construction meetings and conference calls to which the CPUC is invited to attend. Timely notification, whether during construction meetings, conference calls, plan of the day distribution, plan of the day calls, Barnard email updates, and call/text updates from Subcontractor EC(s), Subcontractor CL, and/or Subcontractor FLs, must be sufficient to allow response time for CPUC monitors to be present for that activity, if necessary. If daily or weekly look ahead schedules are generated, the CPUC EM will be copied.
- The Subcontractor EC(s) are the appropriate contacts for obtaining information on construction activity schedules or construction practices. The CPUC EM and other designated agency representatives or staff may talk to anyone on the construction site to ask questions



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about their activity, but Barnard construction personnel may opt to refer the CPUC EM to the Subcontractor FL, Subcontractor CL, or Barnard Construction Management personnel.

- The communication guidelines state that CPUC EMs will communicate with the Subcontractor FLs, Subcontractor CLs, and Subcontractor EC(s), as appropriate, regarding schedules, status of surveys, permit status, compliance issues, and other matters affecting the project at-large or project components. This approach is due to the connection of these management positions to the Project Management Team, Construction Management Team, and agencies' representatives, especially as it relates to global project issues. However, communication and cooperation between CPUC EMs, and Subcontractor FMs and Subcontractor Specialty Monitors is also encouraged for site-specific information, last-minute schedule changes, and to address potentially imminent compliance issues.
- A preliminary list of construction monitoring personnel and managers, identified by title, with contact information is provided in Appendix G. An updated list will be distributed as needed to keep all parties informed of monitor and staff additions/changes, as well as construction scheduling changes. This list of personnel, subsequent updates, and construction schedule changes will be distributed to all persons on the list throughout the construction process.
- Updated resource maps (including GIS data if requested) will be provided to the CPUC EM

### 4.1.1 Pre-Construction Compliance Coordination

SCE is required by the terms of the mitigation measures, APMs, and permitting requirements of other agencies to prepare various plans and obtain approval of these plans, in addition to performing surveys and studies prior to construction. As necessary, SCE will conduct meetings, conference calls, and site visits with the CPUC, technical representatives of the CPUC third-party monitor, and other agencies. The purpose of the pre-construction compliance coordination process is to:

- Discuss and document the status of all required SCE's submittals,
- Document the findings of data reviews and jurisdictional agency approvals,
- Review SCE submittals,
- Document the status of mitigation measures/APMs as they apply to the Project or phased work packages, and
- Discuss refinements or minor changes to the Project.

The goal of the pre-construction process is to complete all required actions so the CPUC and other agencies, as appropriate, can issue NTP authorizations and permits for each Project work package.

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A pre-construction meeting was held on February 2, 2017 with the CPUC, SCE, and CPUC EMs to review the MMCRP and mutually agree upon the Project's communication protocol. Based on discussion at the meeting and ongoing input from each party, this MMCRP was updated. Other pre-construction activities include the following:

- Field verification of clearly delineated (e.g., staking, flagging, etc.) work locations to confirm any need for siting adjustments based on the presence of sensitive resources
- Field verification of any construction yard sites

### 4.1.2 Communication Protocol During Construction

Many mitigation measures were derived from agency input. The CPUC EM along with SCE or the SCE designee, will be responsible for contacting resource agencies and immediately notifying them of issues arising with regard to matters under their jurisdiction. CPUC shall be copied on all correspondence (email or letter) and provided copies of documentation that flow between SCE and resource agencies. If an unresolved issue regarding compliance with a mitigation measure affects a permit requirement under the jurisdiction of a resource agency, the CPUC EM will contact the SCE EPM and they will contact the agency to discuss resolution.

#### 4.1.2.1 Daily Communication During Construction

Generally, problems encountered during construction can be resolved in the field through regular communication among the Subcontractor CLs, Subcontractor FLs, Subcontractor FMs, Subcontractor Specialty Monitors, Construction Management, and CPUC EMs. Field staff will be equipped with cell phones and will be available to receive phone calls during construction. The preliminary Project contact list is included in Appendix G and will be updated as needed by Barnard.

The following provides additional guidelines to ensure effective communication in the field.

**CPUC EMs.** The CPUC EM's primary point of contacts in the field are the Subcontractor FLs. The CPUC EM will contact the Subcontractor FL if an activity is observed that conflicts with one or more of the mitigation measures, APMs, or permit conditions, so that the situation can be corrected by Barnard. The CPUC EM will also coordinate with the Subcontractor FMs and Subcontractor Specialty Monitors, as appropriate. If the CPUC EM cannot immediately reach the Subcontractor FL, the Subcontractor CL or Subcontractor EC will be contacted to address the issue. Similarly, the CPUC EM will contact the Subcontractor FL, CL, or EC for information on where construction crews are working, the status of MMs, and for schedule forecasts. In all cases, the CPUC EM will contact the designated Subcontractor representative if a problem is noted that requires action from the construction contractor. The CPUC EM may discuss construction procedures directly with Barnard Construction Management.

**IMPORTANT:** The CPUC EM will not direct Barnard construction workers, but will contact the designated Barnard construction management personnel. In the event an activity imposes an



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imminent threat to a sensitive resource or an undue risk, the CPUC EM will try to contact the Subcontractor FL, who has the authority to stop work; however, if they are not immediately available, the CPUC EM has the authority to stop work at that location if it is safe to do so.

A preliminary contact list identifying construction monitoring personnel and construction supervisory staff to contact regarding compliance issues is included in Appendix G. The contact list includes each person's title and responsibility, including the names of Barnard, Subcontractor, and CPUC EMs, project managers, supervisory staff, and other members of the team. The list includes phone numbers and e-mail addresses where team members can be reached during construction. The contact list will be updated and redistributed as necessary by Barnard as new personnel are assigned to the Project. [Note: this list is confidential and will not be published or posted on the website; however, project construction and monitoring personnel will have in their possession, or access to, the complete MMCRP, including updated contact list.] Prior to beginning the day's work at a job site, a tail-board briefing will be held by Barnard. Possible subjects include reemphasizing safety and identifying any specific safety concerns associated with that day's operation, potential environmental issues that workers should be aware of, etc.

### **4.1.2.2 Weekly Progress Meetings During Construction**

The SCE EPM will conduct weekly meetings with Barnard construction managers, supervisors, environmental representatives, CPUC EMs, and other appropriate staff to discuss work completed, work anticipated for the following period, and the status of mitigation measures. The meetings also will provide a forum for discussing environmental compliance issues or concerns.

### **4.1.2.3 Scheduled Conference Calls**

The SCE EPM, Barnard EPM, Subcontractor Lead Biologist, Subcontractor EC(s), Subcontractor CLs, CPUC PM, the CPUC EM, and other parties may participate in a bi-weekly teleconference call or as otherwise agreed-upon schedule. The teleconference calls will be scheduled for an agreed date and time and will be used to identify actual or potential issues and discuss solutions. The conference calls will focus on MMCRP implementation, including project progress and schedule, compliance, and project changes.

### **4.1.2.4 As-Needed Interagency Conference Calls**

From time to time during the pre-construction process or during construction, the CPUC, SCE EPM, Barnard EPM, Subcontractor Lead Biologist and/or Subcontractor Biological CL, Subcontractor EC, and/or resource agencies may determine that conference calls may be necessary or appropriate to discuss the status of specific mitigation compliance as they relate to permit requirements. These calls will be scheduled in advance, to the extent feasible, by e-mail, and will include the SCE EPM. An agenda will be provided before the call.

### **4.1.2.5 Helicopter Flight Track Review Meetings**

When helicopters are used, regular meetings between SCE, Barnard, and the CPUC shall take place to review helicopter tracks to verify compliance with permit conditions. Project

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helicopters must be equipped with GPS equipment that will track flight times and routes at all times during operation on the Project.

### 4.1.3 SCE Reportable Events

Unanticipated events may occur that impact project personnel, public safety, or resources and may not be observed by the CPUC EM. While these events may not result in a deviation from or violation of a mitigation measure or permit condition, it is important that these events be reported to the appropriate agencies and the CPUC so they are in a position to respond to questions or concerns from the public or managers. Accordingly, the SCE EPM will immediately report these events to the CPUC EM and to CPUC and other regulatory agencies. The SCE EPM will submit to the appropriate agency, if any, and to CPUC a final electronic notification characterizing the event, actions taken, and outcomes.

Any event that affects, or could potentially affect, Project personnel or public health and safety is immediately reportable and would include the following examples:

- An occurrence that posed or could have posed a risk to public health and safety
- Any event requiring emergency response (police or fire)
- A 'near miss' event involving construction equipment and, in the SCE EPM's reasonable judgment, had the potential to result in serious bodily harm or death.
- Any instance of materials falling from helicopters
- Any fire caused by construction activities
- Inadequate traffic control resulting in an accident
- Any toppled piece of equipment

Any event that impacts, or poses an imminent risk to, a sensitive resource is immediately reportable and would include the following examples:

- Any event a mitigation measure failed to address
- A violation of a permit condition
- Any resource buffer incursion by construction personnel or significant non-compliance incident
- Any directed work stoppage or construction holds
- Discovery of unanticipated resources such as archaeological artifacts outside of known cultural sites

### 4.1.4 Questions and Clarifications

Questions and the need to clarify Project requirements will periodically arise throughout the implementation process. The SCE EPM and CPUC shall submit important questions and clarifications in writing via email. Barnard will submit compliance questions and clarifications to SCE via the Request for Information process. Resolutions and any CPUC determinations shall be documented in compliance and monitoring reports, and/or in email correspondence.

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Questions and clarifications that take an extended period of time to resolve shall be tracked by the CPUC Monitoring Team until a resolution has been reached.

### 4.1.5 Requests for Documentation

The CPUC Monitoring Team may periodically request written documentation and confirmations from SCE and Subcontractor Compliance Personnel that will be entered into the Project record. Requests for documentation and confirmations shall be submitted via email. If the information will take an extended period of time to gather, both SCE and CPUC shall agree upon a timeframe to respond, and the request shall be tracked by the CPUC Monitoring Team until a resolution has been reached.

### 4.1.6 Construction Schedule Delays

SCE EPM shall notify the CPUC Monitoring Team immediately of any delays in the construction schedule as laid out in the MMCRP that may affect the Project and implementation of the MMCRP.

### 4.1.7 Dispute Resolution

The MMCRP will likely reduce or eliminate many potential disputes. However, even with the best preparation, differences in mitigation implementation approaches may occur. Issues should first be addressed informally at the field level, between the CPUC EM and Subcontractor CLs, FLs, or FM/Specialty Monitors, or at the regular progress meetings. Questions may be raised to the SCE EPM, Barnard EPM, and/or Subcontractor EC(s). Should the issue persist or not be resolved at these levels, the following procedures will be used.

- **Step 1.** Disputes and complaints (including those from the public) should be directed first to the BLM and/or CPUC's Project Manager or designee, as appropriate, for resolution. The Project Manager or designee would attempt to resolve the dispute. If the dispute can be resolved by SCE then the BLM and/or CPUC's Project Manager or designee would direct the person to SCE. If the complaint is received by SCE's public liaison person and/or toll-free information hotline, the complaint would be handled by SCE in accordance with Mitigation Measure LU-1a (Prepare construction notification plan).
- **Step 2.** Should this informal process fail, the CPUC and/or BLM Project Manager may initiate enforcement or compliance action to address deviations from the approved project or adopted Mitigation Monitoring Program.

The following steps apply to the CPUC only:

- **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the Mitigation Monitoring Program or the mitigation measures cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed expeditiously in order to resolve the dispute in a timely

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manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.

- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the Resolution, they may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the Commission's Rules of Practice and Procedure for formal and expedited dispute resolution, although a good faith effort should be made to use the foregoing procedure first.

Separate enforcement steps by the regulatory agencies may follow different steps or procedures. The CPUC PM and the SCE EPM will coordinate with other permitting agencies for issues outside the CPUC jurisdiction.

The dispute resolution process could occur concurrently with the communication protocol during construction for non-compliant events.

Separate dispute resolution or enforcement steps involving other regulatory agencies would follow that agency's procedures.

### 4.2 PRE-CONSTRUCTION COMPLIANCE VERIFICATION

Prior to beginning construction, SCE is required by the terms of the mitigation measures, APMs, and various permits and approvals for other regulatory agencies, to prepare and obtain approval of various plans and to perform various surveys and studies. Copies of plans, surveys, and studies will be retained by Aspen and will be provided to the CPUC with all files at the completion of the Project. The plans, surveys, studies, and other documentation required to be completed by SCE before construction are identified in Section 6.

While these documents are being reviewed by the approving agencies, they also are reviewed by the CPUC and its representatives. Resource agencies will also be involved in the review of applicable plans and reports.

As required by approved project MMs and APMs, the CPUC third-party EMs, including project management staff and technical experts, will review and provide comments on all mitigation plans and reports. As appropriate, resource agencies also will be involved in the review of applicable plans and reports, and will provide comments. Comments on these documents will be provided to SCE to ensure that they adequately accomplish the intended reduction in impacts. For required local and State agency permitting/consultations, the CPUC EM will track SCE's progress as it relates to SCE's construction plans and project mitigation, APMs, and permitting requirements. Based on SCE's construction schedule, CPUC may authorize

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construction to begin on a phased basis, and the CPUC EM will handle pre-construction compliance review accordingly. CPUC may issue NTPs for construction of each phase separately, as soon as pre-construction compliance is satisfactorily accomplished for that phase.

- Preconstruction biological and cultural resource survey reports shall be submitted to CPUC for review. The Biological Survey Area (BSA) shall include the Project Component (i.e., tower, access roads, yards, and all other work areas) plus a survey buffer. CPUC EMs shall review each preconstruction survey report and validate biological survey results, including installation of the required species-specific buffer demarcations.
- Once preconstruction survey reports are submitted, the CPUC EMs shall conduct site reviews to verify that the required site boundary and resource staking has been installed in work areas. Typically, each work site shall be delineated by markers (usually wooden stakes) which define the approved work area boundaries. Any Environmentally Sensitive Area (ESA) identified during preconstruction surveys shall also be delineated for avoidance. Only after the preconstruction survey reports and staking verification reviews occur, is construction permitted to begin.

**IMPORTANT:** Compliance with all pre-construction mitigation measures and APMs will be verified prior to construction, and construction may not start on any work package before SCE receives a written NTP from the CPUC PM and other necessary approvals, if any. In addition, demarcation of approved disturbance areas and any resource exclusion areas must be validated in the field by the CPUC EM prior to any construction activities authorized by the NTP. In general, the CPUC will not issue an NTP until all pre-construction requirements have been fulfilled for a given phase. To save time, SCE should identify all required additional work space needs for each phase of construction prior to the start of active construction, so that the locations and their use can be included in the NTP.

### 4.3 NOTICE TO PROCEED PROCESS

CPUC must issue a Notice-to-Proceed (NTP) before construction can start.

SCE will submit a formal request for an NTP. If needed, minor project change requests can be submitted by SCE along with the NTP request for incorporation into the NTP (see Section 4.6.2 for minor project change submittal requirements). On projects where there may be multiple work packages or work sites, SCE may elect to request separate NTPs. Each separate NTP request will be applicable to a defined segment or aspect of the Project.

CPUC will review each NTP request and the applicable pre-construction requirements to ensure that all of the information required to process and approve the NTP is included. CPUC may request additional information or clarification as needed. Based on information provided in the request for an NTP and its review, CPUC will issue the NTP.

In general, an NTP request must include the following:

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- A description of the work to be performed, including a brief comparison of the proposed work and as described in the Final EIR.
- Detailed description of the location, including maps, GIS data, photos, and/or other supporting documents. Maps showing all proposed work areas, access roads, and staging areas (Contractor Yards) will be provided.
- Estimate of total new land disturbance (area) associated with the Project.
- Anticipated number of construction workers, including total workers and peak number
- Anticipated equipment required for construction, including use of helicopters and associated helicopter landing and fueling areas.
- Verification that all mitigation measures, permit conditions or requirements, APMs, project parameters, or other project stipulations have been met, apply, or do not apply to the work covered by the NTP request
- In a case where some outstanding requirements cannot be met prior to issuance of the NTP, an outline of outstanding submittals and how they will be met prior to construction
- Up-to-date resource surveys or a commitment to conduct surveys and submit results prior to construction
- Existing cultural resource surveys or verification that no cultural resources will be significantly impacted
- Copies of permits issued by other agencies, including requirements
- Date when construction is anticipated to begin and duration of work

Attachment C presents the mitigation measures and APMs, the timing for implementation, and whether CPUC review or approval is required before construction can begin. For reference, the NTP issued by CPUC will reiterate CPUC and other agency conditions or requirements that must be satisfied, either before work begins or during construction. The NTP will state whether pre-construction requirements in mitigation measures, APMs, and permits have been met, including the completion of any applicable surveys and studies to be undertaken. If compliance with some requirements cannot be met prior to NTP issuance, the reasons will be identified by SCE and noted in the NTP. At its discretion, CPUC may issue the NTP with conditions. In such an event, the NTP will clearly define any limitations that apply and the actions to be taken and documented by SCE prior to construction.

### 4.4 COMPLIANCE REPORTING DURING CONSTRUCTION

The CPUC EM will perform compliance inspections throughout construction to ensure compliance with all applicable mitigation measures, APMs, plans, permits, and conditions of



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approval from CPUC and other agencies. The CPUC EM will document observations in the project area through field notes and digital photography, using the Fulcrum app. The photographs will be incorporated in weekly reports and related to a discussion of specific construction or compliance activity. In addition, daily field notes documenting compliance of specific crews, construction activities, or resource protection measures will be maintained. Field notes will be used to prepare weekly reports and to track and update the status of mitigation measures listed in Section 6. An example Weekly Compliance Report is provided in Attachment H.

Site visits by CPUC may be coordinated with SCE or be unannounced. All visitors, including regulatory agency personnel, must sign-in with the job site safety representative and receive the site safety briefing before entering work sites. CPUC site visits to active substations will be coordinated with the SCE EPM and/or substation site representative ahead of time. Supplemental information provided by SCE, including pre-construction submittals, survey reports, weekly reports, and agency correspondence also will be used to verify compliance.

Compliance documents and reports will be posted on the CPUC public website, accessible at:

<http://www.cpuc.ca.gov/environment/info/aspen/westofdevers/westofdevers.htm>

Project documents available on the CPUC public website will include approved NTPs, Minor Project Changes, and plans; permits; Temporary Extra Work Space approvals; and the CPUC weekly reports.

### 4.4.1 SCE Weekly Compliance Reports and Checklists

The Subcontractor compliance team will prepare and distribute a weekly environmental compliance status report for distribution to key team members, including the CPUC. The CPUC EM will review the weekly report to ensure that the status of mitigation measures, APMs, and permit conditions is consistent with observations in the field. Questions regarding the status of mitigation measures will be directed to the SCE EPM and/or Subcontractor EC(s). The weekly environmental compliance status report also will be a tool to keep all parties informed of construction progress.

Prior to the start of monitoring activities, SCE shall provide a proposed format describing content and organization of Weekly Compliance Reports for CPUC and BLM review and approval. The Weekly Compliance Report shall be a condensed, singular report that includes, but is not limited to the following components:

- Clear and specific description of weekly construction activities and work locations
- Up to date Project completion status
- Monitoring reports describing construction activities monitored with specific Project locations and any findings or compliance incidents

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- All non-compliance incidents reported during the subject week, including date, detailed description, and corrective actions implemented
- Summary including locations of preconstruction or focused surveys conducted
- All new sensitive resources identified during surveys or construction monitoring for the subject week
- Update of bird nesting activities and buffer distances
- Summary of special status wildlife or plant relocations
- Any SWPPP related corrective actions or maintenance observations identified during the subject week, including date, location, description, and resolution
- Any hazardous materials spills defined as reportable by Project MMs, permits, and/or plans
- List of personnel trained under the WEAP Program, including names and dates

### 4.4.2 CPUC Compliance Reporting

The CPUC EM will determine whether the observed construction activities are consistent with mitigation measures, APMs, and project parameters as identified in the Final EIR, Final EIS/BLM ROD, and Addendum and adopted by the CPUC, as well as any applicable permit conditions. All observations and communications will be noted in a logbook, including photos. Deviations from mitigation measures, APMs, approved Plans, or permit conditions will be considered non-compliant events and will be documented.

- The CPUC EM will report compliance concerns first to the Subcontractor FMs and give them time to resolve compliance issues in coordination with Barnard construction management personnel. If this includes discussions with resource agencies, documentation of such communication and of any subsequent actions to be undertaken to achieve compliance will be provided to the CPUC EM. If the concern involves a permit, because SCE is the permit holder with jurisdictional agencies, the SCE EPM will consult with the applicable resource agencies. If the CPUC EM has an ongoing unresolved concern about a mitigation measure that could affect a permit condition or could result in resource endangerment, the SCE EPM will call the appropriate resource agency to discuss the issue. The SCE EPM and/or EC(s), or other authorized personnel, will take the lead in the coordination effort and in resolving the issue.
- The CPUC EM may request copies of email correspondences, phone logs, or other documentation between SCE and resource agencies to avoid direct involvement from CPUC EMs. However, if there is an unresolved issue regarding compliance with a mitigation measure or permit requirement under the jurisdiction of a resource agency, the CPUC EM may elect to contact the agency to discuss resolution.
- Prior to or subsequent to agency notification, the SCE EPM, assisted by the Barnard EPM, Subcontractor EC(s), Subcontractor Lead Biologist, Subcontractor CLs, and/or Subcontractor



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FLs, will develop a plan to resolve the issue and will follow up with the respective agencies to explain the strategy and receive agency approval.

- If a “take” of a biological resource is imminent or if there is a danger/hazard to a special status biological resource, the CPUC EM can request that work be stopped in that area immediately (as long as it can be done safely); this request should be made to the Subcontractor FM, FL, CL, and/or construction foreman on site. At any time, anyone can order an activity to be halted temporarily if a take or a hazard is imminent and the appropriate personnel have determined it is safe to do so.

Bi-weekly, weekly, or as-needed conference calls will be scheduled and should include a discussion of construction and compliance activities, with CPUC EM, SCE EPM, Barnard EPM, and/or Subcontractor EC(s), CLs, and agency staff participating. As project demands warrant, bi-weekly calls can be rescheduled to a weekly or monthly basis. In addition, additional calls will be scheduled to discuss urgent project needs.

### 4.4.3 SCE Observations (Self-Reporting)

All non-compliance incidents will be recorded and reported. Based on the severity of the non-compliant event, notice to CPUC will be immediate and will also be documented in the weekly reports.

- When a Subcontractor FM identifies a non-compliance incident, the Subcontractor FM will notify the Subcontractor FL and/or Subcontractor CL, who will then notify the Subcontractor EC, who will in turn notify the Barnard EPM and SCE EPM. The SCE EPM or designee, will then notify the CPUC PM by phone, as appropriate, in order to verify that the non-compliance incident has been adequately corrected. A preliminary electronic notification of the suspected non-compliance event will follow via FRED as a non-compliance incident, associated with the FM’s daily monitoring report. A final notification that more fully characterizes the event, actions, and outcomes will follow in the non-compliance resolution, also issued via FRED. Instances that require immediate notification to the CPUC are described in Section 4.1.3. These include Level 0s, Level 2s, Level 3s, and directed work stoppages or construction holds.
- SCE must track all non-compliance incidents and include a summary of incidents in the weekly reports.
- The resource agencies will be notified as soon and reasonably possible by the SCE EPM or designee of any substantive issues regarding resources under their jurisdiction and of any actions taken to resolve the issue, consistent with permit requirements. In addition, the CPUC EM will receive immediate notification of these communications if not already aware of the issue and action.

Compliance level designations will be used to document environmental compliance activities. The following compliance level designations will be used:

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- Level OB (Observation) and Maintenance/Notification Item
- Level 0 (Unanticipated Event)
- Level 1 (Minor Incident)
- Level 2 (Moderate Incident)
- Level 3 (Major Incident)

The following sections provide definitions and examples for each of the compliance levels:

- Level OB - Observation and Maintenance Item
  - Observed field conditions that do not currently result in deviation from a mitigation measure (MM), applicant-proposed measure (APM), or permit condition, but may result in a future incident if not addressed, are documented as OBs. Additionally, OBs are used to capture field issues that are not project related, but occur near the project area. Examples of OBs include the following:
    - Mortality of non-special status species
    - Non-project related trash, vegetation disturbance, etc.
    - Lack of evidence of dust suppression on access roads or work areas (e.g., ground surface dry, no water truck in vicinity, etc.).
    - Isolated cultural finds that do not have sufficient information potential for inclusion in the California or National registers.
    - Isolated artifacts within a known archaeological site that are not significant as independent findings.
    - Non-significant fossils such as non-identifiable fossilized bones, common shell impressions or wood fragments.
  - Maintenance Items are types of OBs that require action (e.g., repair or maintenance action), typically performed by the construction contractor, to prevent the condition from resulting in a future incident. These items are documented on the Maintenance/Notification tool on FRED so that the construction team can be quickly alerted to observed conditions requiring repair or maintenance. Examples of Maintenance Items include the following:
    - Loose bird exclusion netting or other bird deterrent in disrepair.

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- Work area that needs supplemental staking to clarify approved disturbance area limits and/or ESA limits.
  - SWPPP BMP (e.g., fiber roll, silt fence) damaged, dislodged, or containing excess sediment or debris.
  - Inadvertent release of hazardous substances to ground surface (no offsite transport or impacts to sensitive receptor).
- Level 0 – Unanticipated Event
    - A Level 0 will be recorded in FRED when an incident occurs that is beyond the Project’s control. See “Level 3” for action and agency reporting requirements for Level 0 incidents. Examples of Level 0 incidents include the following:
      - Discovery of previously unknown cultural (archaeological resource or feature) or significant paleontological resources.
      - Identification of a special status species not analyzed in the FEIR/FEIS.
      - Encountering previously undocumented subsurface hazardous substances during excavation activities.
- Level 1 – Minor Incident
    - Activities that result in a minor deviation from a MM, APM, or permit condition will be documented as a Level 1 incident in FRED. Examples of Level 1 incidents include the following:
      - Activities outside disturbance area boundaries (no impacts to ESAs).
      - Use of unapproved access roads (no impacts to ESAs).
      - Activities in areas prior to required biological pre-construction survey (no impacts to ESAs).
      - Initiation of onsite construction activities within areas requiring cultural or paleontological monitoring prior to monitors being onsite (no impacts to ESAs).
      - Offsite migration of sediment (no impacts to ESAs).
      - Project personnel working onsite without proof of WEAP training.
    - If repetitive infractions of a mitigation measure continue (whether unintentional or due to lack of action) the incident(s) will be documented and elevated to the

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FL and/or CL. The FL will then coordinate with the EC, who will then coordinate with the SCE EPM and Barnard EPM.

- A documented pattern of Level 1 incidents may result in subsequent non-compliance incidents being elevated to Level 2 – Moderate Incident or Level 3 – Major Incident.
- Level 2 – Moderate Incident
  - Activities that deviate from MM, APM, or permit conditions resulting in direct impacts to sensitive resources will be documented as Level 2 incidents in FRED. Examples of Level 2 incidents include the following:
    - Construction activities outside disturbance area boundaries, within ESA (no impacts to ESAs).
    - Direct impact to a special status species (excludes listed species).
    - Encroachment into an ESA for nesting birds.
    - Removal of an inactive nest without proper approval or monitoring.
    - Disturbance to bat habitat during inactive or maternal seasonal periods, without approval from CDFW.
    - Offsite sediment migration into an ESA.
  - A Level 2 – Moderate Incident can be resolved without a significant delay in construction activities. However, a Level 2 – Moderate Incident may result in a 1-hour work halt to provide the Subcontractor FM sufficient time to notify the Subcontractor FL(s) and/or Subcontractor CL, and the Subcontractor EC, who will in turn notify the Barnard and SCE EPMs. This work halt will also provide the Subcontractor FM time to identify the exclusion area to avoid any further potential impacts to resources, if required, before allowing the resumption of work in a sensitive area.

If Barnard construction management personnel fail to address a problem in a timely manner (within 24 hours), or conditions worsen due to lack of response, the incident could be elevated to a Level 3 – Major Incident. Prompt corrective action of Level 2 – Moderate Incident events will minimize the potential for the problem to escalate to a Level 3 – Major Incident non-compliance level.

- Level 3 – Major Incident
  - Activities that significantly deviate from or violate MM, APM, or permit conditions are considered major incidents and will be documented as Level 3 –

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Major Incidents in FRED. Level 3 – Major Incidents require notification to regulatory agencies, including CPUC, USFWS, and other agencies, as required. Examples of Level 3 incidents include the following:

- Activities occurring in an ESA with direct impacts to a listed species, cultural resources, human remains, or paleontological resources.
  - Non-permitted fill or dredge within a wetland.
  - Take of a listed species resulting from project activities.
  - Take of an active nest.
  - A subsequent non-compliant incident after a documented repetitive occurrences of Level 2 - Moderate Incidents.
- Level 3 – Major Incidents will require the Subcontractor FM to halt construction (1-hour work halt) to avoid impacting a sensitive resource or to avoid a major environmental incident. The Subcontractor FL(s), Subcontractor CL, EC, and Barnard EPM will be immediately notified. The SCE EPM and Barnard EPM will also be notified to assist in providing a required course of action and coordination with the CPUC/BLM/other resource or jurisdictional agencies. The Barnard EPM will communicate to construction workers any additional time delay (greater than 1-hour work halt) and environmental avoidance measures to be implemented by the Barnard.

### 4.4.4 Incident Reports

As presented in Table 4.5-1, definitions for incidents are provided (Level 1-3). Incident Reports for Level 1-3 incidents shall be prepared by the observing party (either CPUC or SCE/Barnard) and submitted to the alternate party within one business day of the observation. Level 2 incidents will be reported through a Project Memorandum. Level 3 incidents require preparation of a Non-Compliance Report (NCR). At a minimum, Incident Reports must include the following information:

- Incident Category
- Compliance Level (if applicable)
- Incident Start Date (i.e., date event began, if known, or initial observation date)
- Summary of incident (i.e., description of the vent or observation, personnel present, and actions taken to resolve the issue)
- Resolution date (if known)

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All incidents (Levels 1-3) shall be addressed in MMCRP reports prepared by both SCE and CPUC (e.g., Daily, Weekly, and Post-Construction Reports), and Incident Reports shall be attached to the MMCRP reports for the applicable period.

In addition to Incident Reports, incidents arising to the level of Non-Compliance may require preparation of memoranda describing the event in greater detail and corrective actions necessary to bring the Project back into compliance.

### 4.5 INCIDENTS AND STOP WORK ORDERS

The goal of this MMCRP is to plan for and avoid any non-compliance incidents that could occur during implementation; nonetheless, there is a potential for compliance incidents to arise due to a variety of factors. For the purposes of this MMCRP, compliance incident levels are defined in Table 4.5-1 below. This section addresses incidents that may occur and procedures that shall be followed to document them.

#### 4.5.1 Incident Categories

Incident categories for the Project include compliance level incidents, Occupational Safety and Health Administration (OSHA)-recordable health and safety incidents, vehicle accidents that are related to Project traffic closures, and public complaints.

##### 4.5.1.1 Compliance Level Incidents

SCE and CPUC are responsible for evaluating compliance and addressing any inadequacies throughout implementation of the MMCRP. Compliance incidents will be documented by assigning one of five compliance levels and associated terms. If all Project requirements are observed being followed adequately, then the Project will be at an acceptable compliance level and no further actions are required. A description of compliance levels that will be used for the Project and examples of compliance level incidents are listed in Table 4.5-1.

When documenting compliance level incidents, the reporting party shall assign an initial compliance level that appropriately represents the severity of the incident based on factors including, but not limited to, the following:

- Scope of the deviation or violation
- Risk of impact to resources
- Actual impact to resources
- Number of repeated incidents
- How the incident could have been prevented

The need to change initially reported compliance levels may arise if the incident level was over- or under-reported. The CPUC PM shall make final determinations regarding the appropriate compliance level for each incident as needed, and the CPUC Monitoring Team shall maintain a record of all incidents for the Project that will be analyzed in the CPUC Post-Construction and Final Monitoring Reports. In addition to the levels of compliance described in Table 4.5-1, the

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CPUC may note events or observations that, if left unaddressed, could have the potential to affect compliance and become a compliance incident. The CPUC will typically inform SCE Compliance Personnel of such observations in the field. If such events or observations continue to occur following CPUC’s field notification to the SCE Compliance Personnel, and corrective action is not taken within the stated period, a Project Memorandum (written warning) or Non-Compliance Report (NCR) may be issued by the CPUC.

A non-compliant event regarding environmental resources may involve other agencies, in which case, the CPUC EM will:

- Confirm that SCE has informed the applicable resource agency when non-compliant actions have the potential to harm an environmental resource or species (outside the reporting process associated with incidental takes as permitted by the resource agency).
- If timely notification is not made by SCE, the CPUC EM will contact the applicable resource agency.

If permit or resources issues are involved, the CPUC and/or resource agencies may order work stoppages and the development of strategies for successful resource/species protection, consistent with the applicable permit or mitigation measure.

**IMPORTANT:** The CPUC EM does not have the authority to shut down or restart construction, nor shall the CPUC EM direct the work of a construction contractor or subcontractor. However, if an imminent threat to safety or an unpermitted risk to a sensitive resource is observed, the CPUC EM has the responsibility to advise the SCE EPM or Barnard Construction Management to immediately cease the threatening activity until the situation is rectified, as long the activity can be stopped safely. The CPUC EM shall immediately notify the CPUC PM and Aspen Monitoring Manager and report the status. If no action is taken by SCE in response to the situation, CPUC will determine next steps.

**Table 4.5-1. Compliance Levels**

Incident Level, Reporting Term, and Severity	Examples	Action	Follow-Up
<b>Incident</b>			
<b>Level OB (Observation) and Maintenance/ Notification Item</b>  Definition: An event or observation that does not result in a deviation from project requirements, but may result in a future incident if not addressed.	Incidental mortality of non-special status species  Non-project related trash or vegetation disturbance  A stormwater BMP showing signs of deterioration, but where no rain event resulting in sediment runoff resulted.	The Contractor is notified of the observation and takes measures to resolve the issue in a timely manner.	The Contractor notifies the SCE Compliance Team once the issue has been resolved.



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**Table 4.5-1. Compliance Levels**

Incident Level, Reporting Term, and Severity	Examples	Action	Follow-Up
<p><b>Level 0 – Unanticipated Event</b></p> <p>Definition: An event that is outside the Project’s control.</p>	<p>Discovery of previously unknown cultural (archeological resource or feature) or significant paleontological resources</p> <p>Identification of a special status species not anticipated based on analysis in the FEIR</p> <p>Encountering previously undocumented subsurface hazardous substances during excavation activities.</p>	<p>The Subcontractor FL, FM, or Specialty Monitor onsite will stop work. SCE’s EPM or assigned designee will inform the CPUC Monitoring Supervisor and any other relevant resource agencies. SCE EPM will work with the agencies to develop and implement an appropriate solution. The event will be documented in the Daily Report and included in the Weekly Compliance Report.</p>	<p>The SCE Compliance Team and Contractor staff will implement the solutions as developed in cooperation with the appropriate agencies. Ultimately, the efficacy of the solutions will be documented by the FM, FL, and/or specialty monitors as construction activities resume.</p>
<p><b>Level 1 - Minor Incident</b></p> <p>Definition: An event or observation that slightly deviates from project requirements, but does not put a resource at unpermitted risk.</p>	<p>Project personnel used an unapproved access road or turnaround area, but the site was previously disturbed and the action did not put a sensitive resource at risk.</p> <p>Soil or construction material was placed outside of an approved work area, but the material was removed at the end of the day.</p>	<p>An oral warning shall be provided by the CPUC Monitoring Supervisor to SCE’s EPM (or assigned designee). Corrective action shall begin by the next construction day. CPUC Monitoring Supervisor will also briefly document the incident in a follow-up email. A Minor Incident will be documented in the Daily FRED Report and included in the Weekly Compliance Report.</p>	<p>If corrective action is not initiated by the next construction day, the CPUC Monitoring Supervisor will elevate the incident to the CPUC Monitoring Manager who will review courses of action available and will notify the CPUC Project Manager if necessary. If allowed to continue, this non-compliance incident could result in a serious impact over time, and result in a Project Memorandum or Non-Compliance Report (NCR).</p>
<p><b>Level 2 – Moderate Incident</b></p> <p>Definition: An event or observation that deviates from project requirements and puts a resource at risk, but is corrected without impacting the resource</p>	<p>A fuel tank was stored overnight within specified limits of a water body without secondary containment, but did not result in release of hazardous materials.</p> <p>Mobilization of equipment or materials to a previously disturbed work site prior to receiving NTP authorization from CPUC.</p> <p>A diesel-powered vehicle not in use was observed idling for an extended period of time.</p>	<p>A verbal notice shall be given by the Subcontractor FL or FM, followed immediately by written documentation of the incident in a Project Memorandum sent by the CPUC Monitoring Supervisor to SCE’s EPM (or assigned designee). Corrective action shall begin immediately if feasible.</p>	<p>If corrective action is not taken immediately or the corrective action is insufficient, the CPUC EM shall notify the CPUC PM, Monitoring Manager, and Monitoring Supervisor, who will review courses of action available, potentially including issuance of a Project Memorandum, NCR, a Project Stop Work Order, and/or action under the CPUC’s CEQA Citation Program.</p>



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**Table 4.5-1. Compliance Levels**

Incident Level, Reporting Term, and Severity	Examples	Action	Follow-Up
<p><b>Level 3 – Major Incident</b></p> <p>Definition: An event or observation that violates project requirements and impacts a resource. Repeated Compliance Deviations left unaddressed may also rise to a Level 3 incident.</p>	<p>Vegetation clearing and grading of a work site prior to receiving NTP authorization from CPUC.</p> <p>Soil or construction material was placed outside of an approved work area in an environmentally sensitive area.</p> <p>Erosion control BMPs failed during a storm and sediment was discharged into a sensitive area.</p> <p>Project vehicles entered a sensitive resource exclusion area and damaged a resource.</p>	<p>A verbal notice shall be given to the Subcontractor FL or FM, followed immediately by a written NCR from the CPUC Monitoring Manager to SCE’s EPM (or assigned designee). Corrective action shall begin immediately. Based on the severity of a given infraction or pattern of non-compliant activity, the CPUC may direct that all or some portion of the work be stopped. The CPUC may also exercise the CEQA Citation Program.</p>	<p>If a shutdown of construction or an activity is ordered, the construction or activity shall not resume until authorized by the CPUC PM in writing. If corrective action is not taken immediately or the corrective action is insufficient, the CPUC EM shall notify the CPUC PM, Monitoring Manager, and Monitoring Supervisor, who will review courses of action available, potentially including a project Stop Work Order and/or action under the CPUC’s CEQA Citation Program.</p>

### 4.5.1.2 Health and Safety Incidents

SCE’s and CPUC’s most important responsibility is maintaining safe working conditions and protecting the public, including workers from exposure to hazards related to the Project. Accordingly, health and safety incident reporting by SCE will be conducted consistent with the “self-identified potential violation” requirements of the CPUC’s Safety Citation Program<sup>3</sup> and the Accident Reporting Requirements.<sup>4</sup> Specific types of health and safety incidents to be reported under these programs are described below:

- A potential violation that poses a significant safety threat to the public and/or utility staff, contractors, or subcontractors.
- Any instance of fraud, sabotage, falsification of records and/or any other instances of deception by SCE’s personnel, contractors, or subcontractors, that caused or could have caused a potential violation, regardless of the outcome.
- Incidents that (a) result in fatality or personal injury rising to the level of in-patient hospitalization and attributable or allegedly attributable to utility owned facilities; or (b) are the subject of significant public attention or media coverage and are attributable or allegedly attributable to utility facilities; (c) involve damage to property of the utility or others estimated to exceed \$20,000 that are attributable or allegedly attributable to utility owned facilities.

<sup>3</sup> See D.16-09-055, Appendix A, at p. 8, Section G.3.b, criteria 1 and 3, <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M167/K781/167781364.PDF>.

<sup>4</sup> See [http://docs.cpuc.ca.gov/PUBLISHED/FINAL\\_DECISION/55906-05.htm#TopOfpage](http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/55906-05.htm#TopOfpage).

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SCE EPM will notify the CPUC PM of these types of health and safety incidents within one business day of learning about the incident and provide an incident report with the Weekly Compliance Report for the Project unless additional time is needed and the CPUC agrees to an extension for submitting the final incident report. SCE will also notify the CPUC about traffic accidents within construction traffic control areas. In addition to the incidents described above, the CPUC may request that SCE report on other health and safety incidents that don't fall into one of the above-listed categories if the CPUC determines that such reporting is necessary to ensure construction is completed in a safe manner.

Health and safety incidents will not reflect negatively on SCE's environmental compliance record unless a specific project requirement, permit, or plan requirement was violated.

### 4.5.1.3 Public Complaints

The public may take issue with one or more aspects of the Project. Barnard will maintain a Project Information Line during construction and will assign a dedicated Public Liaison to the Project that will be responsible for tracking and handling public complaints. Public complaints may be submitted formally to SCE or CPUC through email or the Project Information Line. Members of the public that have questions, concerns, or complaints on the Project will be directed to the SCE Public Affairs Manager and Project Information Line, and contact information will be supplied as requested. Complainants who approach field personnel at the Project site will be referred to the Project Information Line to formally submit their complaint. SCE shall work with the CPUC on best practices for handling public complaints that are received. The Public Liaison will respond to public complaints within 24 hours upon receipt. CPUC shall notify SCE of public complaints received by the CPUC to facilitate SCE's timely response to these complaints and SCE will add these to the electronic complaint log. SCE shall make every reasonable effort to work with members of the public and correct actions leading to complaints, as feasible.

SCE shall also provide monthly summaries of the public complaints and how each complaint was addressed. The CPUC PM will coordinate with the SCE EPM on the adequacy of corrective actions or additional measures to be implemented, as needed.

Public complaints will not reflect negatively on SCE's environmental compliance record unless a specific Project requirement, permit, or plan requirement was violated.

### 4.5.2 Identifying Incidents

The Subcontractor FM, Subcontractor FL, and CPUC EM are primarily responsible for identifying and initially reporting incidents during inspection of the Project site; however, compliance incidents may also be observed by other personnel in the field or during review of project reports. The CPUC Monitoring Team may also identify compliance incidents through review of SCE's compliance reporting.

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SCE shall make every attempt to self-report any compliance incidents that occur. Self-reporting compliance incidents and preventing them from repeating demonstrate a commitment to compliance and will foster a relationship of trust between SCE and CPUC.

### 4.5.3 Notification

SCE and CPUC shall notify one another of compliance incidents within one business day of the initial observation so compliance can be adequately addressed. Response procedures do not need to be finalized when initial notification is provided.

Jurisdictional agencies may also require notification if incidents are documented that relate to their jurisdiction over the Project. The SCE EPM or designee shall make all such notifications to each jurisdictional agency and will provide copies to the CPUC of official notifications and submittals provided to other agencies or advise CPUC of notifications that were made to other agencies, as necessary. If CPUC believes additional notifications are required, the CPUC may direct SCE to provide those notifications or make those notifications in coordination with SCE Compliance Personnel.

### 4.5.4 Stop Work Orders

When it is safe to do so, any SCE Compliance Personnel or the CPUC Monitoring Team has the authority to issue Stop Work Orders to temporarily halt or redirect project activities if a sensitive resource is put in undue risk beyond previously authorized or permitted levels. In addition, the CPUC Monitoring Team may also stop or redirect work if unauthorized project activities are observed, such as use of work area that has not been approved or is significant compliance risks remain unresolved. The CPUC PM will make any final determinations regarding Stop Work Orders for the project.

### 4.5.5 CEQA Citation Program

CPUC may exercise the CEQA Citation Program adopted by the Commission in Resolution E-4550. The program delegates authority to Commission staff to draft and issue citations and levy fines for non-compliance with a PTC or CPCN. The Resolution allows Commission staff to efficiently issue fines when needed to quickly address non-compliance incidents that are occurring in the field.

## 4.6 PROJECT CHANGES

At various times throughout project construction (following approval of final design plans), changes to the Project requirements may be needed to facilitate construction or provide more effective protection of resources. When changes are necessary for specific field situations, SCE and CPUC, in consultation with the applicable resource agencies, will work together to find solutions that avoid conflicts with adopted MMs.

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### 4.6.1 Transition from Preliminary Design to Final Engineering

The EIR for the Project is based on preliminary design. Because the Project has now been approved by CPUC and other jurisdictional agencies, SCE has been in the process of completing final project design and engineering. Some project component locations may have been refined as engineering progresses in order to comply with mitigation measures, avoid or minimize environmental impacts, and reduce or eliminate feasibility constraints.

Mitigation measure requirements were finalized at the time of project approval, and pre-construction compliance submittals will be reviewed based on the requirements in these measures. The process outlined below allows for changes in the case of unforeseen circumstances, as long as the intent of the mitigation measure is satisfied (i.e., the impact is mitigated as intended, consistent with residual impact determinations in the EIR).

### 4.6.2 Minor Project Refinements

The CPUC PM, along with the CPUC Monitoring Team, will ensure that any process, to consider minor project changes that may be necessary due to final engineering or variances or deviations from the procedures identified under the monitoring program, is consistent with CEQA requirements.

- No project changes will be approved by the CPUC PM if they
  - would be located outside of the geographic boundary of the project study area,
  - create new or substantially more severe significant impacts, or
  - conflict with any mitigation measure or applicable law or policy.
- Minor project changes are strictly limited to changes that
  - will not trigger other permit requirements unless the appropriate agency has approved the change, and
  - clearly and strictly comply with the intent of the mitigation measure or applicable law or policy.

This determination is ministerial, and shall be made by the CPUC Project Manager. SCE must seek any other project changes by a Petition for Modification (PFM). Should a project change require a PFM, supplemental environmental review under CEQA would be required.

Requests for staff approval of a minor project change must be made in writing and should include the following:

- A detailed description of the proposed minor changes, including an explanation of why the refinements are necessary, and a reference to the approved documents.
- Photos, maps, GIS data, and other supporting documentation illustrating the difference between: the existing conditions in the area, the approved project, and the proposed minor changes.

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- The potential impacts of the proposed minor changes, including a discussion of each environmental issue area that could be affected by the minor changes with accompanying verification that there will be no substantial increase in the severity of any previously identified significant impacts to resources affected by the project and no new significant impacts, after application of previously adopted mitigation.
- Whether the minor changes conflict with any applicant proposed measures or mitigation measures.
- Whether the minor changes conflict with any applicable guideline, ordinance, code, rule, regulation, order, decision, statute or policy.
- Water/wetland/storm water related resource information if the minor changes would result in any additional land disturbance, road distance or width, changes to jurisdictional delineation of waters, or changes to water protection best management practices.
- Date of expected construction at the minor changes site area.

The CPUC PM may request additional information or a site visit in order to process the request. Possible examples of changes that may be approved by staff after final engineering include, but are not limited to:

- Adjusting the alignment of a project within the study area that was used in the original environmental analysis to avoid unanticipated impacts related to cultural artifacts, buried utility infrastructure, hazardous and toxic substances, and other land use impacts including effects on homeowners, so long as the adjustment does not create a new significant impact or a substantial increase in the severity of a previously identified significant impact.
- Adjusting the alignment of a project within the study area that was used in the original environmental analysis to avoid or adapt to conditions on the ground that vary from the conditions that existed at the time of the original environmental analysis, so long as the adjustment does not create a new significant impact or a substantial increase in the severity of a previously identified significant impact.

**IMPORTANT:** To initiate a project minor changes request, SCE will fill out a Project Minor Change Request Form (see Attachment I), prepare the appropriate supporting documentation, and obtain the required signatures. SCE will complete and submit the Minor Project Change Request Form and supporting documentation by email (electronic copy) to the CPUC Project Manager with a copy to Aspen.

As soon as reasonably possible, the CPUC Monitoring Team will review the request to ensure that all of the information required to process the minor project change is included, and then forward the request to the CPUC Project Manager for review and approval. The CPUC Project Manager may request a site visit from the CPUC EM, or may request additional information to

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process the request. In some cases, project minor changes may require approval by jurisdictional agencies as well.

All approved minor change requests will be tracked in tabular format in the weekly reports.

### 4.6.3 Temporary Extra Work Space

For the purposes of this MMCRP, Temporary Extra Work Space (TEWS) is defined as a preexisting work space (i.e., no site preparation is required) that would be used by SCE during construction for a period of up to 60 days, and that was not specifically identified and evaluated during the CEQA process. Anything required to be utilized for a period longer than 60 days will require a minor project change approval (see Section 4.6.2).

In the event that SCE determines a need for a construction TEWS, it must submit such a request to the CPUC, consistent with the communication protocol. SCE will not be permitted to use a TEWS prior to receiving written authorization from the CPUC. If appropriate, SCE will also send a copy of the TEWS to affected jurisdictional agencies.

SCE must demonstrate that:

- (1) The TEWS is located in a disturbed (void of vegetation) area with no sensitive resources or land uses onsite or within proximity of the proposed work space such that they may be significantly impacted by the work,
- (2) No ground-disturbing activities or site improvements will occur,
- (3) SCE has permission of the applicable landowner (e.g., municipality or private) to use the work space, and
- (4) Use of the TEWS will not result in any significant environmental impacts.

Following is a list of the specific information that SCE would be required to submit with its TEWS request:

- Date of request
- Location of the TEWS (detailed description, including maps if required)
- Property owner of TEWS
- An explanation of the need for the TEWS
- An analysis that demonstrates no new significant impacts will result from use of the TEWS including: compaction contributing to runoff rates or other stormwater/watershed effects; observed existing impacts to the site, such as old oil spills or other potentially hazardous or polluting substances; abandoned vehicles, equipment, or other materials; or other sensitive resources
- Biological surveys (prior to construction)
- Cultural resource survey if appropriate (if site is not paved)

## 4 PROCEDURES

- Duration and dates of expected use of the TEWS
- Details of the expected condition of the site after use

A sample TEWS form is included as Attachment J.

### 4.7 COMPLIANCE TRACKING

Compliance with mitigation requirements will be tracked by the CPUC. Important Project procedures, such as formal requests and approvals, as well as incidents, will also be tracked throughout the Project for record keeping and post-project analysis.

CPUC will track other important information for the Project record as part of the CPUC prepared Monthly Monitoring Summary Report, including NTP and MPR requests and approvals, resolutions to important compliance risks that require follow-up, and documented incidents.



### 5 RECORDS MANAGEMENT

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Detailed weekly reports would be prepared and submitted by the BLM/CPUC environmental monitoring team. These would include detailed information on construction activities, compliance activities observed by the Environmental Monitors and others documented by SCE, any issues and their resolution, and photographs of relevant activities and conditions.

SCE has required Barnard to have its own monitors for particular resources, depending on project needs and activities. These monitors provide daily reports/surveys that are entered into SCE's Field Reporting Environmental Database (FRED) system. It is assumed that FRED or a similar database would be employed on this project. BLM/CPUC Environmental Monitors would have access to the reports and the database. Construction is not allowed to start in a particular area until the required pre-construction surveys and flagging/staking are completed per the MMCRP, and the BLM/CPUC environmental monitor has validated compliance.

SCE, through Barnard, is to provide the BLM and CPUC with written weekly and annual reports of the project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project.

Weekly status reports will be filed and used by the CPUC EM to prepare a final environmental compliance report following the completion of construction. The final report will provide an overview of construction and a discussion of environmental compliance and lessons learned.

A publicly accessible website for the Project is maintained by the CPUC to make available current versions of reports and other documents prepared for mitigation compliance.

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available by the CPUC for public inspection on request, consistent with critical infrastructure requirements, requirements to protect cultural resources, and General Order (G.O.) 66-C. In order to facilitate the public's awareness, the CPUC will post this MMCRP document, weekly reports, and other pertinent Project documents on the CPUC public website. Other monitoring compliance reports, copies of permits, and documents will be available in their final form on the Project website once they are approved by the CPUC or other permitting agencies. Access to Critical Energy Infrastructure Information (CEII) documentation, the location of protected cultural resources, and other information meeting the standards for non-disclosure set forth in G.O. 66-C will not be available on the public Web site.

The CPUC public website is accessible at:

<http://www.cpuc.ca.gov/environment/info/aspen/westofdevers/westofdevers.htm>



### 6 MITIGATION MONITORING PROGRAM TABLES

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#### 6.1 TRACKING TABLES

Section 6.3 below provides an overview of the mitigation measures and APMs included in the Final EIR, Final EIR Addendum, and Final EIS/BLM ROD that are applicable to implementation of the Project. The CPUC will use expanded versions of the mitigation measure/APM tables in Attachments C, D, and E to accurately track the status of mitigation measures during the pre-construction planning, construction monitoring, and post-construction monitoring/operation and maintenance phases of the Project. Similarly, separate tables listing measures that require CPUC approval may be generated. During construction, a copy of the mitigation measure/APM tables with measures to be implemented during construction (Attachment D) will be maintained by the EC, and all supervisory staff working on the Project should be familiar with its contents. In addition, copies of all applicable plans and permits compiled prior to construction as a result of the pre-construction measures (e.g., Stormwater Pollution Prevention Plan, Hazardous Substance Treatment Plan, USFWS Biological Opinion, etc.) shall also be kept on-site on flash drives, computers, tablets, or binders in SCE construction trailers and all supervisory staff working on the Project should be familiar with their contents.

#### 6.2 EFFECTIVENESS REVIEW

The CPUC may conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate, including as a result of the Dispute Resolution procedure outlined in Section 4.2. If in review the Commission determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, then the Commission in coordination with the jurisdictional agency(ies) may impose additional reasonable conditions to effectively mitigate these impacts. These reviews will be conducted in a manner consistent with the Commission's rules and practices.

#### 6.3 MITIGATION MEASURES AND APPLICANT PROPOSED MEASURES

SCE identified measures to address potentially significant impacts – the Applicant-Proposed Measures (APMs) – and these APMs are considered to be part of the description of the Proposed Project. Based on the EIR and EIS analyses, additional mitigation measures were identified for adoption to reduce potential significant impacts of the Proposed Project. The additional mitigation measures supplement and supersede the APMs where the mitigation measures are more stringent. Any APMs that have been entirely superseded by mitigation measures have not been included in the following tables.

Attachments C, D, and E include the mitigation measures and APMs from the Final EIR, Final EIS Addendum, and Final EIS/BLM ROD that constitute the environmental requirements that will be the primary guideline for determining compliance with the MMCRP. Given that the BLM only made minor revisions to the CPUC approved mitigation measures, any changes are noted within Attachments C, D, and E in red font. The tables (separated by environmental issue

## 6 MITIGATION MONITORING PROGRAM TABLES

area) indicate the resource of concern, the measure to be implemented, the monitoring requirement, and when the measure is to be implemented.

The tables have also been sorted and divided into pre-construction measures (Attachment C), measures to be implemented during construction (Attachment D), and post-construction mitigation measures (Attachment E). Note: In Attachments C, D, and E, mitigation measures are denoted with Mitigation Measure preceding the measure title and Applicant Proposed Measures are denoted with APM. To facilitate tracking of the measures' requirements, some measures have been subdivided by task and/or timing. In these instances, text in the table indicates that the row does not contain the entire measure, only a specific task.

During construction a copy of the Mitigation Measure/ Applicant Proposed Measure tables with measures to be implemented during construction (Attachment D) should be kept with each crew working on the ROW, stored in a laptop, tablet, or binder, and all supervisory staff working on the project should be familiar with its contents. In addition, copies of all applicable plans and permits compiled prior to construction as a result of the pre-construction measures (i.e., SWPPP, Hazardous Substance Treatment Plan, USFWS BO, etc.) shall also be kept with each crew working on the ROW, stored in a laptop, tablet, or binder, and all supervisory staff working on the project should be familiar with their contents.

Table 6.3-1 summarizes the timing requirements of each project mitigation measure and APM.

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre-Construction	Construction	Post-Construction/ Restoration
<b><i>Final EIR, Final EIR Addendum &amp; Final EIS/BLM ROD</i></b>			
<b>Agriculture</b>			
AG-3a: Agricultural Lands Coordination	✓	✓	✓
<b>Air Quality</b>			
AQ-1a: Fugitive Dust Control	✓	✓	
APM AIR-1: Exhaust Emissions Control Plan	✓	✓	
AQ-1b: Off-Road Emissions	✓	✓	
AQ-1c: Control Helicopter Emissions		✓	
<b>Biological Resources – Vegetation</b>			
VEG-1a: Biological Monitoring and Reporting	✓	✓	✓
VEG-1b: Worker Environmental Awareness Program	✓	✓	
VEG-1c: Minimize Native Vegetation and Habitat Loss	✓	✓	✓
VEG-1d: Restoration of Temporary Disturbance Areas	✓	✓	✓
VEG-1e: Compensate for Permanent Habitat Loss		✓	✓
VEG-2a: Weed Management	✓	✓	
VEG-3a: Jurisdictional Waters and Wetlands	✓	✓	

## 6 MITIGATION MONITORING PROGRAM TABLES

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre-Construction	Construction	Post-Construction/ Restoration
VEG-4a: Effects on Special-Status Plants	✓	✓	✓
VEG-5a: Comply with Tree Removal Requirements	✓	✓	
VEG-5b: MSHCP Consistency	✓		
<b>Biological Resources – Wildlife</b>			
WIL-1a: Pre-Construction Biological Surveys	✓	✓	
WIL-1b: Wildlife Impact Avoidance and Minimization	✓	✓	
WIL-1c: Nesting Bird Management	✓	✓	
WIL-2a: Desert Tortoise Protection	✓	✓	
WIL-2b: Raven Control	✓	✓	✓
WIL-2c: Riparian Bird Protection	✓	✓	
WIL-2d: Stephens’ Kangaroo Rat	✓	✓	✓
WIL-2e: Coastal California Gnatcatcher	✓	✓	✓
WIL-2f: Golden Eagle	✓	✓	
WIL-2g: Burrowing Owl	✓	✓	
WIL-2h: Special-Status Terrestrial Herpetofauna	✓	✓	
WIL-2i: Bats	✓	✓	
WIL-2j: Special-Status Small Mammals	✓	✓	
WIL-2k: American Badger, Ringtail, and Desert Kit Fox	✓	✓	
WIL-3a: Bird Collision	✓	✓	✓
<b>Cultural Resources</b>			
CL-1a: Cultural Surveys to Avoid Sensitive Areas	✓	✓	
CL-1b: Develop and Implement a CRMP	✓	✓	✓
CL-1c: Train Personnel Regarding Cultural Resources	✓	✓	
CL-1d: Conduct Cultural Monitoring During Construction	✓	✓	
CL-2a: Treatment of Previously Unidentified Resources	✓	✓	
CL-2b: Treatment of Human Remains	✓	✓	
<b>Geology &amp; Soils</b>			
G-1a: Evaluate Active Fault Zones	✓		
G-2a: Evaluate for Landslides and Unstable Slopes	✓		
G-5a: Foundation Design	✓		✓
<b>Hazards &amp; Hazardous Materials</b>			
HH-1a: Hazardous Materials and Waste Management	✓	✓	
HH-2a: Soil Management	✓	✓	
HH-3a: Identification of Pesticide/Herbicide Contamination	✓	✓	
<b>Land Use</b>			
LU-1a: Construction Notification Plan	✓	✓	

## 6 MITIGATION MONITORING PROGRAM TABLES

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre- Construction	Construction	Post-Construction/ Restoration
<b>Mineral Resources</b>			
MR-1a: Coordinate with Quarry Operations	✓	✓	
<b>Noise</b>			
N-1a: BMPs for Construction Noise Management	✓	✓	
N-1b: Helicopter Noise	✓	✓	
<b>Paleontological Resources</b>			
PAL-1a: Inventory and Evaluate Paleontological Resources	✓	✓	
PAL-1b: Paleontological Resources Mitigation and Monitoring Plan	✓	✓	✓
PAL-1c: Paleontological Training of Construction Personnel	✓	✓	
PAL-1d: Paleontology Monitoring	✓	✓	
PAL-1e: Reporting and Curation		✓	✓
<b>Recreation</b>			
R-1a: Coordinate Construction with Recreation Area Representatives	✓	✓	
R-1b: Identify Alternative Recreation Areas	✓	✓	
R-1c: Temporary Detour for Pacific Crest National Scenic Trail Users	✓	✓	
<b>Transportation and Traffic</b>			
T-1a: Construction Transportation Plan	✓	✓	
T-1b: Traffic Control Plans	✓	✓	
T-1c: Restrict Lane Closures	✓	✓	
T-1d: Disruption of Bus and Transit Service	✓	✓	
T-1e: Pedestrian and Bicycle Safety	✓	✓	
T-1f: Access to Property	✓	✓	
T-3a: Avoid Conflicts with Planned Transportation Improvements	✓	✓	
T-4a: Repair Road Damage Caused by Construction Activities	✓	✓	✓
T-5a: Obtain Need Approvals from Railroads	✓	✓	
T-6a: Notification of Temporary Loss of Parking	✓	✓	
T-7a: Final Helicopter Use Plan	✓	✓	
T-8a: FAA Review and Approval of Structures and Spans	✓	✓	✓
<b>Utilities and Public Services</b>			
UPS-1a: Use Non-Potable Water for Construction	✓		
UPS-2a: Protection of Pipelines and Overhead & Underground Utilities	✓		✓
<b>Visual Resources</b>			
VR-1a: Screening of Construction from View	✓	✓	
VR-2a: Minimize Vegetation Removal and Ground Disturbance	✓	✓	

## 6 MITIGATION MONITORING PROGRAM TABLES

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre- Construction	Construction	Post-Construction/ Restoration
VR-3a: Reduce Color Contrast	✓	✓	✓
VR-4a: Views of Retaining Walls and Land Scars	✓	✓	
VR-5a: Marking of Natural Features	✓	✓	
VR-7a: Minimize Night Lighting	✓	✓	✓
VR-8a: Minimize Color Contrast	✓	✓	✓
VR-9a: Treatment of Structure Surfaces	✓	✓	
<b>Water Resources and Hydrology</b>			
WR-2a: Erosion Control and Water Quality	✓	✓	✓
WR-3a: Flood, Erosion, and Scour Protection	✓	✓	✓
APM HYDRO-1: Maintain Existing Flow Patterns	✓	✓	
<b>Wildland Fire</b>			
WF-1a: Fire Management Plan	✓	✓	✓
<b>Electrical Interference</b>			
EIS-1a: Conductor Surface Gradient	✓	✓	
EIS-1b: Electronic Interference	✓	✓	✓
EIS-2a: Grounding	✓	✓	✓
<b>Biological Opinion Conservation Measures</b>			
<b>General Conservation Measures</b>			
CM-1	✓	✓	✓
CM-2	✓	✓	✓
CM-3	✓	✓	✓
CM-4	✓	✓	✓
CM-5		✓	✓
CM-6		✓	✓
CM-7		✓	
CM-8		✓	✓
CM-9	✓	✓	✓
CM-10		✓	✓
CM-11		✓	✓
CM-12		✓	✓
CM-13		✓	✓
CM-14		✓	✓
CM-15		✓	✓
CM-16	✓	✓	✓
CM-17		✓	✓

## 6 MITIGATION MONITORING PROGRAM TABLES

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre- Construction	Construction	Post-Construction/ Restoration
<b>Coastal California Gnatcatcher Conservation Measures</b>			
CM-18	✓	✓	✓
CM-19		✓	✓
CM-20		✓	✓
<b>Southwestern Willow Flycatcher Conservation Measures</b>			
CM-21	✓	✓	✓
CM-22		✓	✓
CM-23		✓	✓
<b>Least Bell's Vireo Conservation Measures</b>			
CM-24	✓	✓	✓
CM-25		✓	✓
CM-26		✓	✓
<b>Desert Tortoise Conservation Measures</b>			
CM-27	✓	✓	✓
CM-28		✓	✓
CM-29		✓	✓
CM-30	✓	✓	✓
CM-31	✓	✓	✓
CM-32	✓	✓	✓
CM-33		✓	✓
CM-34		✓	✓
CM-35		✓	✓
CM-36	✓	✓	✓
<b>Coachella Valley Milk-Vetch Conservation Measures</b>			
CM-37	✓	✓	✓
CM-38	✓	✓	✓
CM-39		✓	✓
<b>Stephens' Kangaroo Rat Conservation Measures</b>			
CM-40	✓		
CM-41	✓	✓	✓
<b>Final EIR, Final EIR Addendum &amp; Final EIS/BLM ROD</b>			
<b>Agriculture</b>			
AG-3a: Agricultural Lands Coordination	✓	✓	✓
<b>Air Quality</b>			
AQ-1a: Fugitive Dust Control	✓	✓	
AQ-1b: Off-Road Emissions	✓	✓	

## 6 MITIGATION MONITORING PROGRAM TABLES

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre- Construction	Construction	Post-Construction/ Restoration
AQ-1c: Control Helicopter Emissions		✓	
<b>Biological Resources – Vegetation</b>			
VEG-1a: Biological Monitoring and Reporting	✓	✓	✓
VEG-1b: Worker Environmental Awareness Program	✓	✓	
VEG-1c: Minimize Native Vegetation and Habitat Loss	✓	✓	✓
VEG-1d: Restoration of Temporary Disturbance Areas	✓	✓	✓
VEG-1e: Compensate for Permanent Habitat Loss		✓	✓
VEG-2a: Weed Management	✓	✓	
VEG-3a: Jurisdictional Waters and Wetlands	✓	✓	
VEG-4a: Effects on Special-Status Plants	✓	✓	✓
VEG-5a: Comply with Tree Removal Requirements	✓	✓	
VEG-5b: MSHCP Consistency	✓		
<b>Biological Resources – Wildlife</b>			
WIL-1a: Pre-Construction Biological Surveys	✓	✓	
WIL-1b: Wildlife Impact Avoidance and Minimization	✓	✓	
WIL-1c: Nesting Bird Management	✓	✓	
WIL-2a: Desert Tortoise Protection	✓	✓	
WIL-2b: Raven Control	✓	✓	✓
WIL-2c: Riparian Bird Protection	✓	✓	
WIL-2d: Stephens' Kangaroo Rat	✓	✓	✓
WIL-2e: Coastal California Gnatcatcher	✓	✓	✓
WIL-2f: Golden Eagle	✓	✓	
WIL-2g: Burrowing Owl	✓	✓	
WIL-2h: Special-Status Terrestrial Herpetofauna	✓	✓	
WIL-2i: Bats	✓	✓	
WIL-2j: Special-Status Small Mammals	✓	✓	
WIL-2k: American Badger, Ringtail, and Desert Kit Fox	✓	✓	
WIL-3a: Bird Collision	✓	✓	✓
<b>Cultural Resources</b>			
CL-1a: Cultural Surveys to Avoid Sensitive Areas	✓	✓	
CL-1b: Develop and Implement a CRMP	✓	✓	✓
CL-1c: Train Personnel Regarding Cultural Resources	✓	✓	
CL-1d: Conduct Cultural Monitoring During Construction	✓	✓	
CL-2a: Treatment of Previously Unidentified Resources	✓	✓	
CL-2b: Treatment of Human Remains	✓	✓	

## 6 MITIGATION MONITORING PROGRAM TABLES

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre- Construction	Construction	Post-Construction/ Restoration
<b>Geology &amp; Soils</b>			
G-1a: Evaluate Active Fault Zones	✓		
G-2a: Evaluate for Landslides and Unstable Slopes	✓		
G-5a: Foundation Design	✓		✓
<b>Hazards &amp; Hazardous Materials</b>			
HH-1a: Hazardous Materials and Waste Management	✓	✓	
HH-2a: Soil Management	✓	✓	
HH-3a: Identification of Pesticide/Herbicide Contamination	✓	✓	
<b>Land Use</b>			
LU-1a: Construction Notification Plan	✓	✓	
<b>Mineral Resources</b>			
MR-1a: Coordinate with Quarry Operations	✓	✓	
<b>Noise</b>			
N-1a: BMPs for Construction Noise Management	✓	✓	
N-1b: Helicopter Noise	✓	✓	
<b>Paleontological Resources</b>			
PAL-1a: Inventory and Evaluate Paleontological Resources	✓	✓	
PAL-1b: Paleontological Resources Mitigation and Monitoring Plan	✓	✓	✓
PAL-1c: Paleontological Training of Construction Personnel	✓	✓	
PAL-1d: Paleontology Monitoring	✓	✓	
PAL-1e: Reporting and Curation		✓	✓
<b>Recreation</b>			
R-1a: Coordinate Construction with Recreation Area Representatives	✓	✓	
R-1b: Identify Alternative Recreation Areas	✓	✓	
R-1c: Temporary Detour for Pacific Crest National Scenic Trail Users	✓	✓	
<b>Transportation and Traffic</b>			
T-1a: Construction Transportation Plan	✓	✓	
T-1b: Traffic Control Plans	✓	✓	
T-1c: Restrict Lane Closures	✓	✓	
T-1d: Disruption of Bus and Transit Service	✓	✓	
T-1e: Pedestrian and Bicycle Safety	✓	✓	
T-1f: Access to Property	✓	✓	
T-3a: Avoid Conflicts with Planned Transportation Improvements	✓	✓	
T-4a: Repair Road Damage Caused by Construction Activities	✓	✓	✓



## 6 MITIGATION MONITORING PROGRAM TABLES

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre- Construction	Construction	Post-Construction/ Restoration
T-5a: Obtain Need Approvals from Railroads	✓	✓	
T-6a: Notification of Temporary Loss of Parking	✓	✓	
T-7a: Final Helicopter Use Plan	✓	✓	
T-8a: FAA Review and Approval of Structures and Spans	✓	✓	✓
<b>Utilities and Public Services</b>			
UPS-1a: Use Non-Potable Water for Construction	✓		
UPS-2a: Protection of Pipelines and Overhead & Underground Utilities	✓		✓
<b>Visual Resources</b>			
VR-1a: Screening of Construction from View	✓	✓	
VR-2a: Minimize Vegetation Removal and Ground Disturbance	✓	✓	
VR-3a: Reduce Color Contrast	✓	✓	✓
VR-4a: Views of Retaining Walls and Land Scars	✓	✓	
VR-5a: Marking of Natural Features	✓	✓	
VR-7a: Minimize Night Lighting	✓	✓	✓
VR-8a: Minimize Color Contrast	✓	✓	✓
VR-9a: Treatment of Structure Surfaces	✓	✓	
<b>Water Resources and Hydrology</b>			
WR-2a: Erosion Control and Water Quality	✓	✓	✓
WR-3a: Flood, Erosion, and Scour Protection	✓	✓	✓
APM HYDRO-1: Maintain Existing Flow Patterns	✓	✓	
<b>Wildland Fire</b>			
WF-1a: Fire Management Plan	✓	✓	✓
<b>Electrical Interference</b>			
EIS-1a: Conductor Surface Gradient	✓	✓	
EIS-1b: Electronic Interference	✓	✓	✓
EIS-2a: Grounding	✓	✓	✓
<b>Biological Opinion Conservation Measures</b>			
<b>General Conservation Measures</b>			
CM-1	✓	✓	✓
CM-2	✓	✓	✓
CM-3	✓	✓	✓
CM-4	✓	✓	✓
CM-5		✓	✓
CM-6		✓	✓
CM-7		✓	

## 6 MITIGATION MONITORING PROGRAM TABLES

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre- Construction	Construction	Post-Construction/ Restoration
CM-8		✓	✓
CM-9	✓	✓	✓
CM-10		✓	✓
CM-11		✓	✓
CM-12		✓	✓
CM-13		✓	✓
CM-14		✓	✓
CM-15		✓	✓
CM-16	✓	✓	✓
CM-17		✓	✓
<b>Coastal California Gnatcatcher Conservation Measures</b>			
CM-18	✓	✓	✓
CM-19		✓	✓
CM-20		✓	✓
<b>Southwestern Willow Flycatcher Conservation Measures</b>			
CM-21	✓	✓	✓
CM-22		✓	✓
CM-23		✓	✓
<b>Least Bell's Vireo Conservation Measures</b>			
CM-24	✓	✓	✓
CM-25		✓	✓
CM-26		✓	✓
<b>Desert Tortoise Conservation Measures</b>			
CM-27	✓	✓	✓
CM-28		✓	✓
CM-29		✓	✓
CM-30	✓	✓	✓
CM-31	✓	✓	✓
CM-32	✓	✓	✓
CM-33		✓	✓
CM-34		✓	✓
CM-35		✓	✓
CM-36	✓	✓	✓
<b>Coachella Valley Milk-Vetch Conservation Measures</b>			
CM-37	✓	✓	✓
CM-38	✓	✓	✓

## 6 MITIGATION MONITORING PROGRAM TABLES

**Table 6.3-1. Implementation Phases Applicable to Each MM, APM, and Biological Opinion CM**

Measure Title	Pre- Construction	Construction	Post-Construction/ Restoration
CM-39		✓	✓
<b>Stephens' Kangaroo Rat Conservation Measures</b>			
CM-40	✓		
CM-41	✓	✓	✓

## **ATTACHMENT A**

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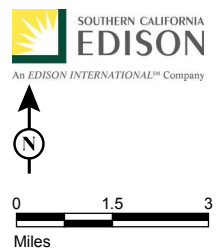
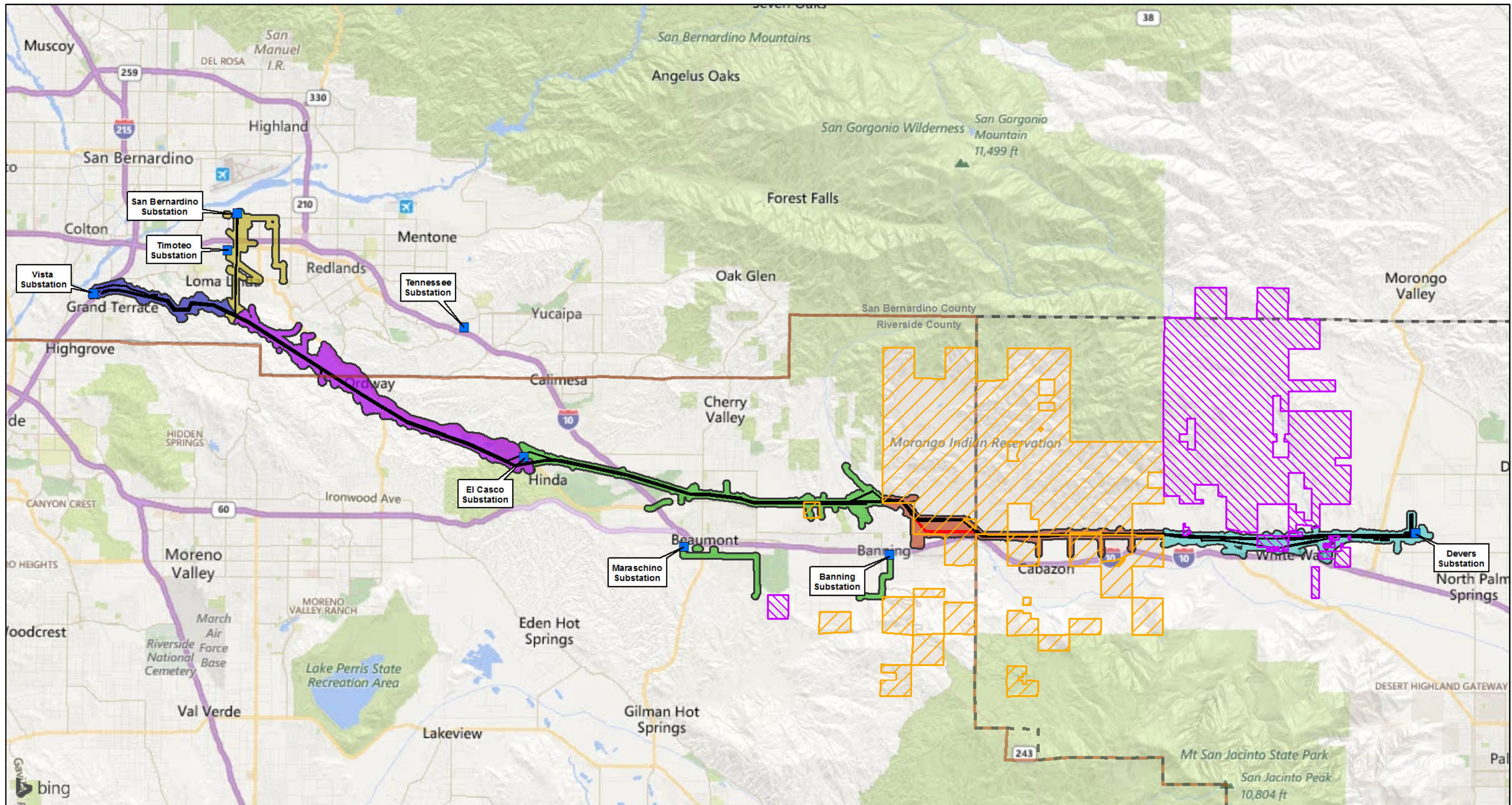
### Project Alignment and Yard Figures

## Attachment A-1

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Transmission





**LEGEND**

- Project Study Area
- Existing Transmission Line Right of Way
- Proposed Right of Way
- Substation
- Segment 1
- Segment 2
- Segment 3
- Segment 4
- Segment 5
- Segment 6
- U.S. Bureau of Land Management
- Morongo Reservation
- Western Riverside County MSHCP
- Coachella Valley MSHCP

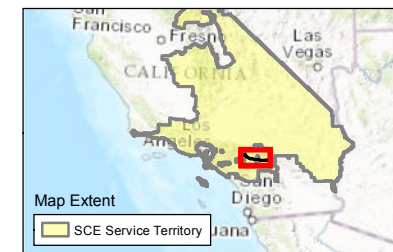


FIGURE 1-1

Southern California Edison  
West of Devers Upgrade Project  
**Project Overview and Study Area**  
NTPR Transmission



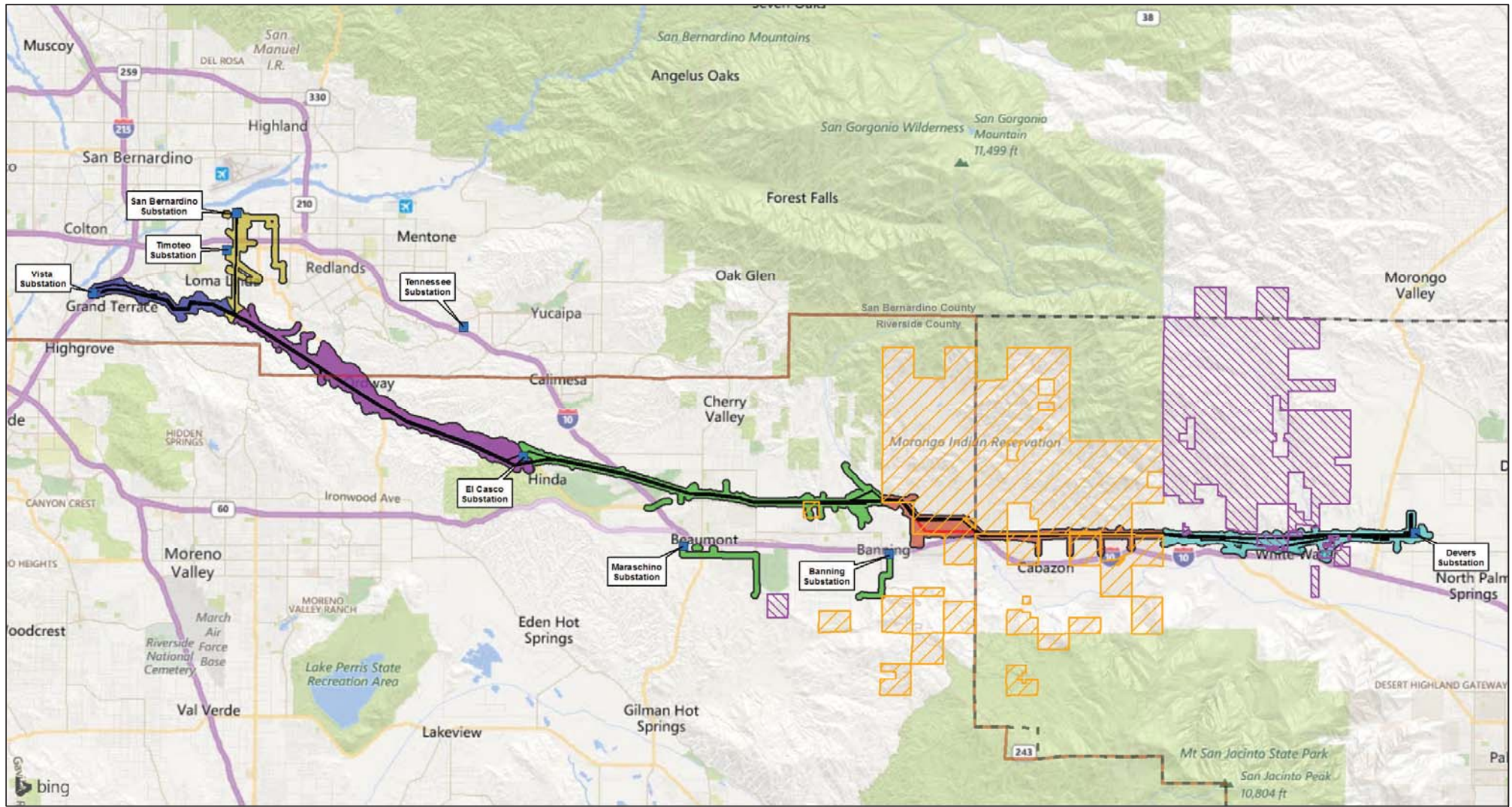


## **Attachment A-2**

---

Substations





**LEGEND**

- Project Study Area
- Existing Transmission Line Right of Way
- Proposed Right of Way
- Substation
- Segment 1
- Segment 2
- Segment 3
- Segment 4
- Segment 5
- Segment 6
- U.S. Bureau of Land Management
- Morongo Reservation
- Western Riverside County MSHCP
- Coachella Valley MSHCP

Source: SCE, Bing Maps

C:\WOD\GALT\WodMapFiles\Plans\NTPR\_Subtransmission\_2017-05-16\Fig1a\_WOD\_NTPR\_SubTrans\_Dist\_Tel\_Overview\_2017-07-27.mxd (7/27/2017)



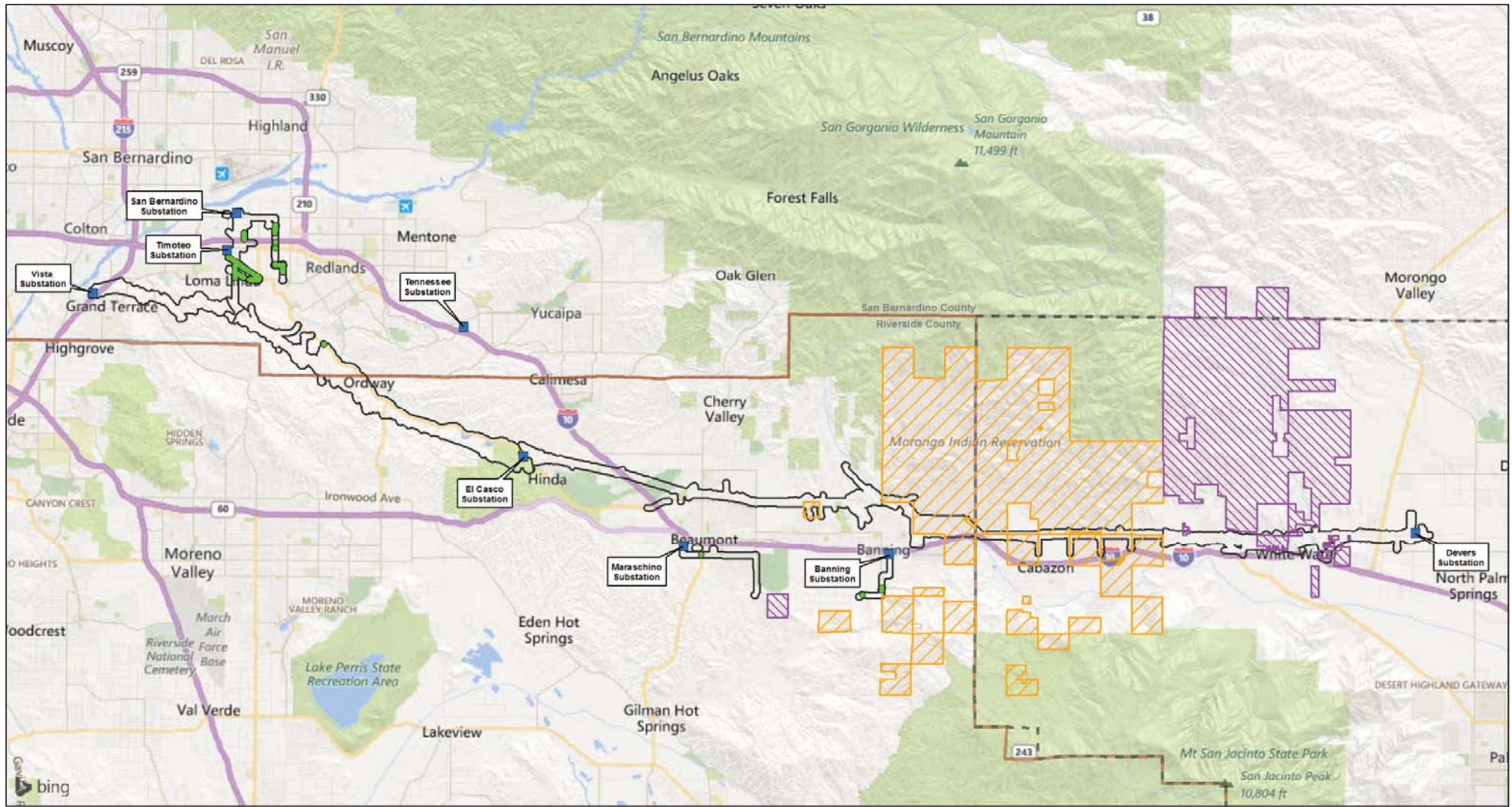
FIGURE 1a

**DRAFT**

Southern California Edison  
West of Devers Upgrade Project  
Project Overview and Study Area  
NTPR Distribution, Subtransmission & Telecom

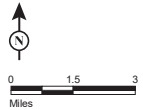






**LEGEND**

- Project Study Area
- Distribution
- Substation
- U.S. Bureau of Land Management
- Morongo Reservation
- Western Riverside County MSHCP
- Coachella Valley MSHCP



Source: SCE, Bing Maps

C:\WOD\GALT\WodMapFiles\Plans\NTPR\_Subtransmission\_2017-05-16\Fig1b\_WOD\_NTPR\_SubTrans\_Dist\_Tel\_Overview\_2017-07-27.mxd (7/27/2017)



FIGURE 1b

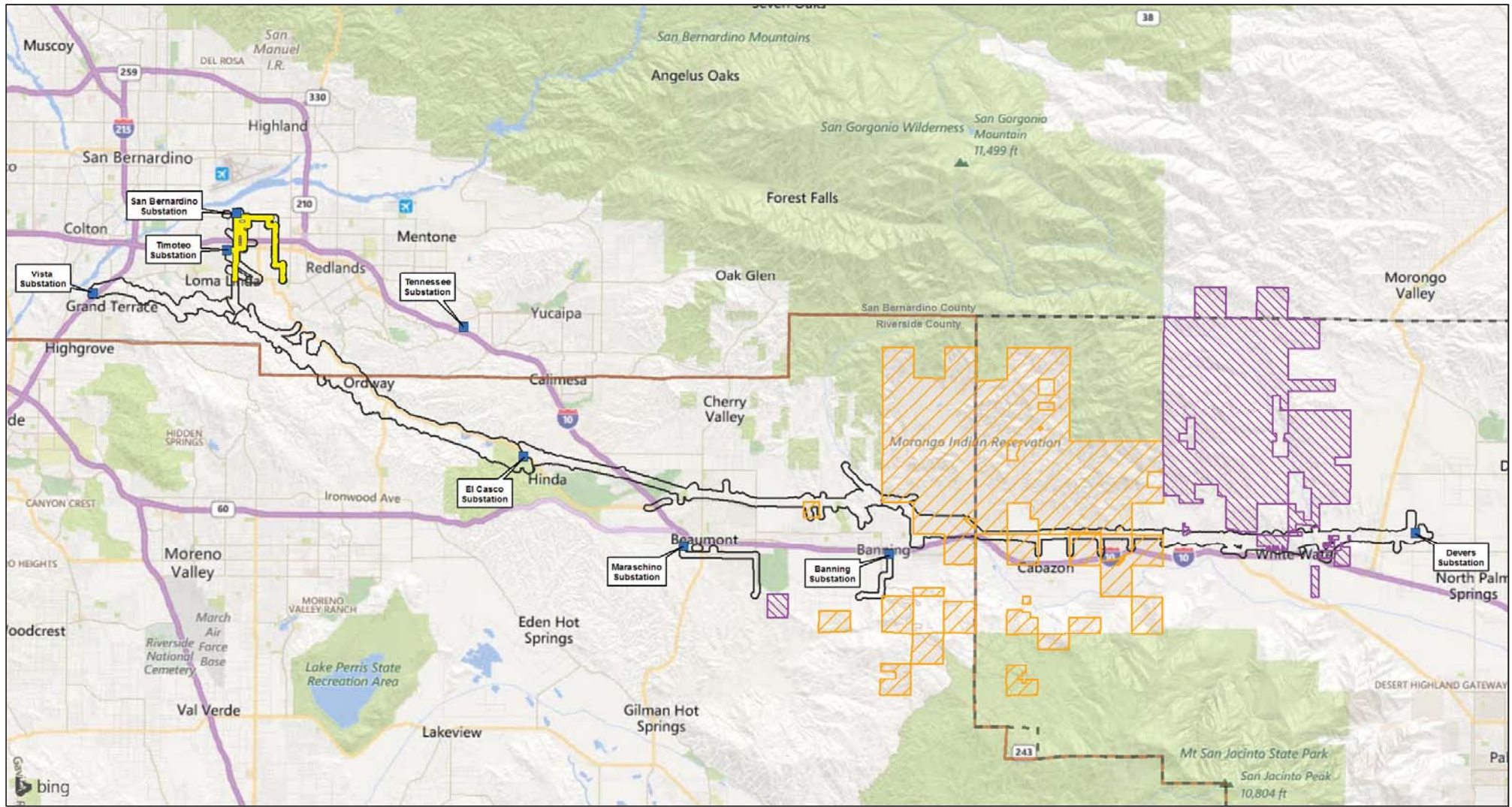
**DRAFT**

Southern California Edison  
West of Devers Upgrade Project  
Distribution Project Element

NTPR Distribution, Subtransmission & Telecom

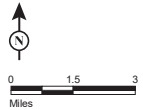






**LEGEND**

- Project Study Area
- Subtransmission
- Substation
- U.S. Bureau of Land Management
- Morongo Reservation
- Western Riverside County MSHCP
- Coachella Valley MSHCP



Source: SCE, Bing Maps

C:\WOD\GALT\WodMapFiles\Plans\NTPR\_Subtransmission\_2017-05-16\Fig1c\_WOD\_NTPR\_SubTrans\_Dist\_Tel\_Overview\_2017-07-27.mxd (7/27/2017)



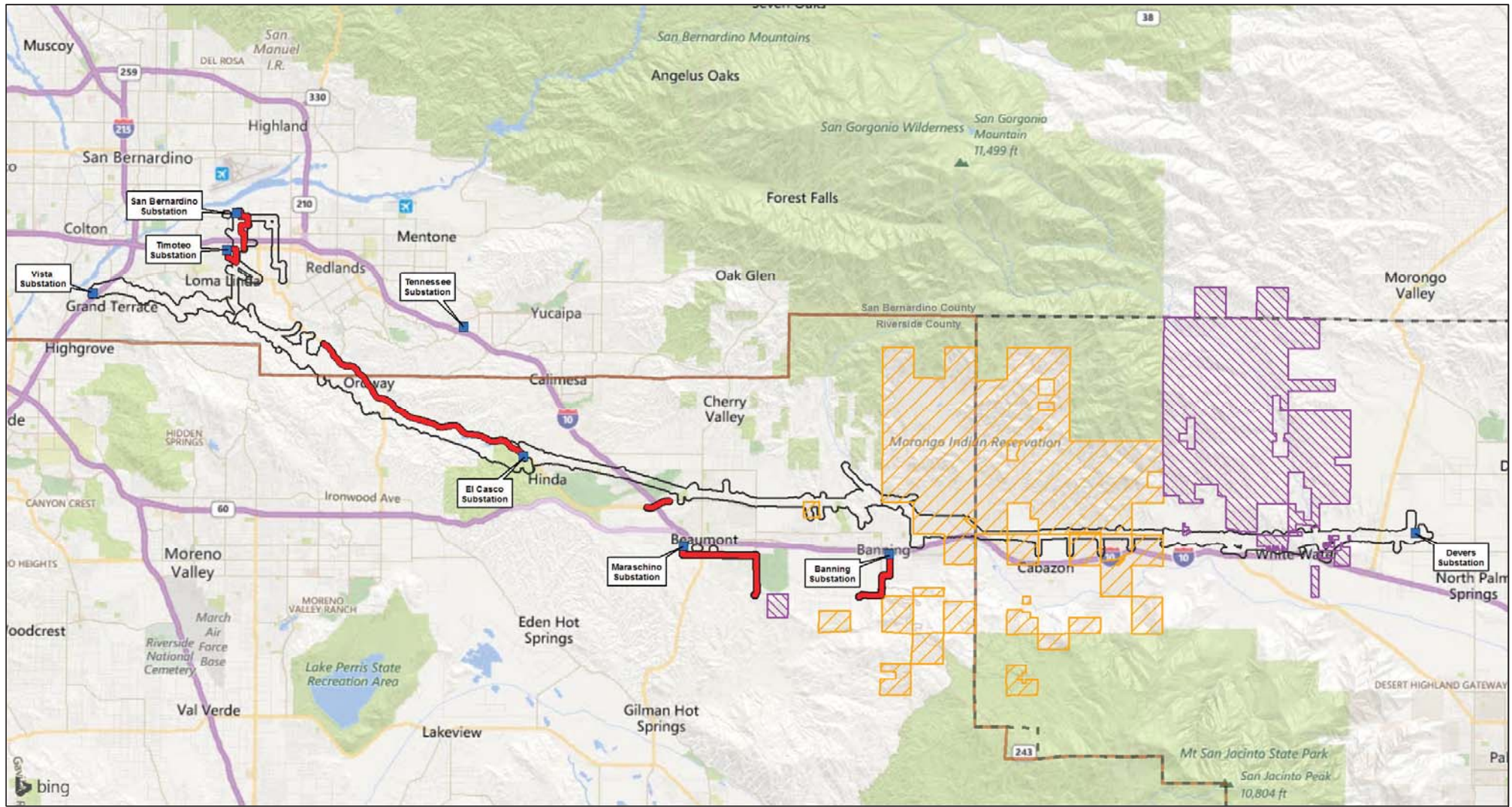
FIGURE 1c

**DRAFT**

Southern California Edison  
West of Devers Upgrade Project  
**Subtransmission Project Element**  
NTPR Distribution, Subtransmission & Telecom

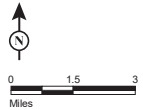






**LEGEND**

- Project Study Area
- Telecom
- Substation
- U.S. Bureau of Land Management
- Morongo Reservation
- Western Riverside County MSHCP
- Coachella Valley MSHCP



Source: SCE, Bing Maps

C:\WOD\GALT\WodMapFiles\Plans\NTPR\_Subtransmission\_2017-05-16\Fig1d\_WOD\_NTPR\_SubTrans\_Dist\_Tel\_Overview\_2017-07-27.mxd (7/27/2017)



FIGURE 1d

**DRAFT**

Southern California Edison  
West of Devers Upgrade Project  
**Telecom Project Element**

NTPR Distribution, Subtransmission & Telecom

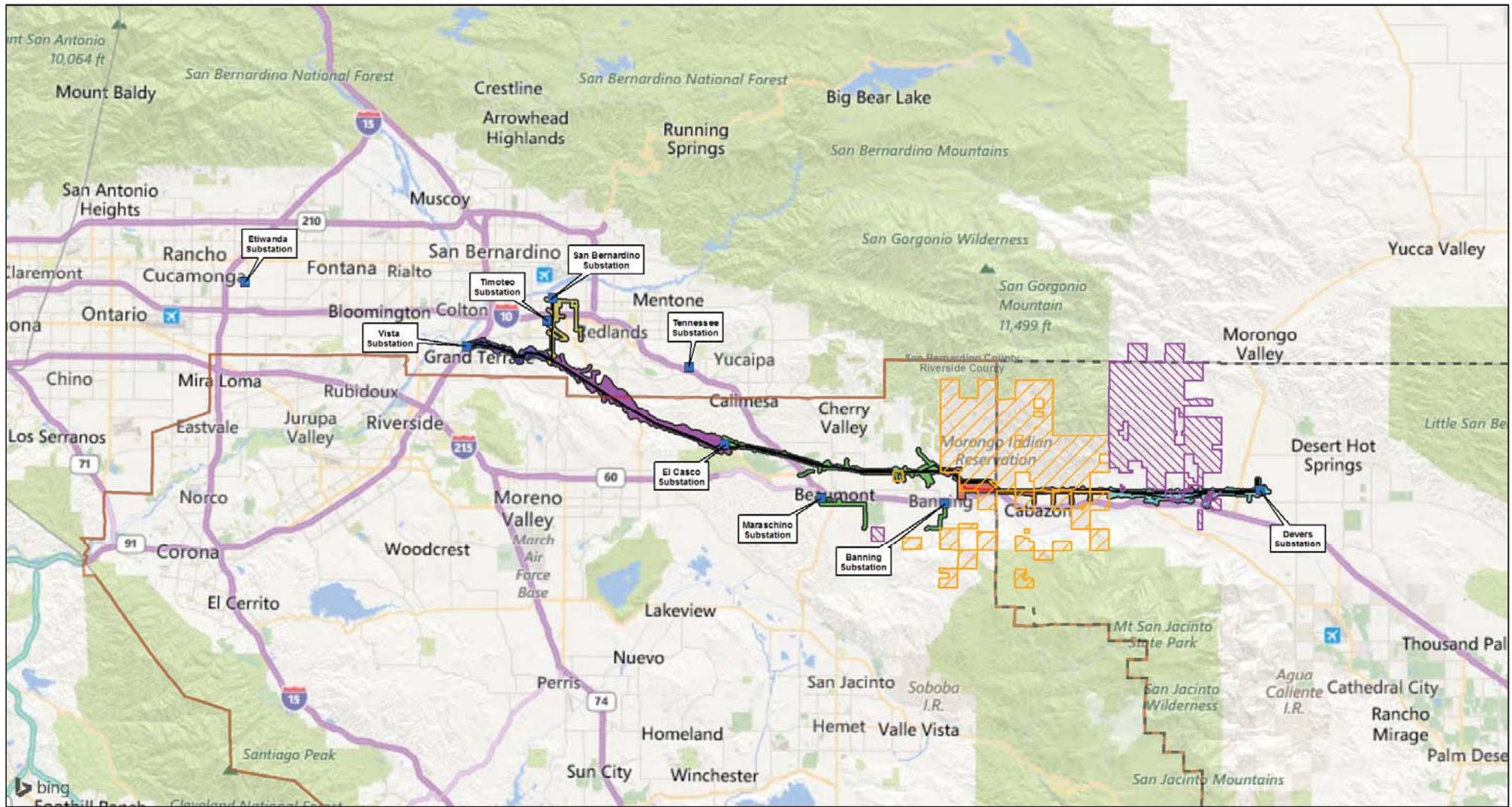


## **Attachment A-3**

---

Telecom, Distribution, and Subtransmission





Source: SCE, Bing Maps

C:\WOD\GALT\WodMapFiles\Plans\NTPR\_Substations\_2017-03-30\Fig1\_WOD\_NTPR\_Substations\_Overview\_2017-03-30.mxd (4/3/2017)



FIGURE 1

**DRAFT**


Southern California Edison  
West of Devers Upgrade Project  
Project Overview and Study Area

**ch2m**





**LEGEND**

 Existing Substation Area



0 200 400  
FEET

SCE, ESRI World Street Map, Bing Imagery, Aerial image © 2016 Google Earth

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FIGURE 2

Etiwanda Substation

Page 2 of 6

**DRAFT**

Southern California Edison  
West of Devers Upgrade Project



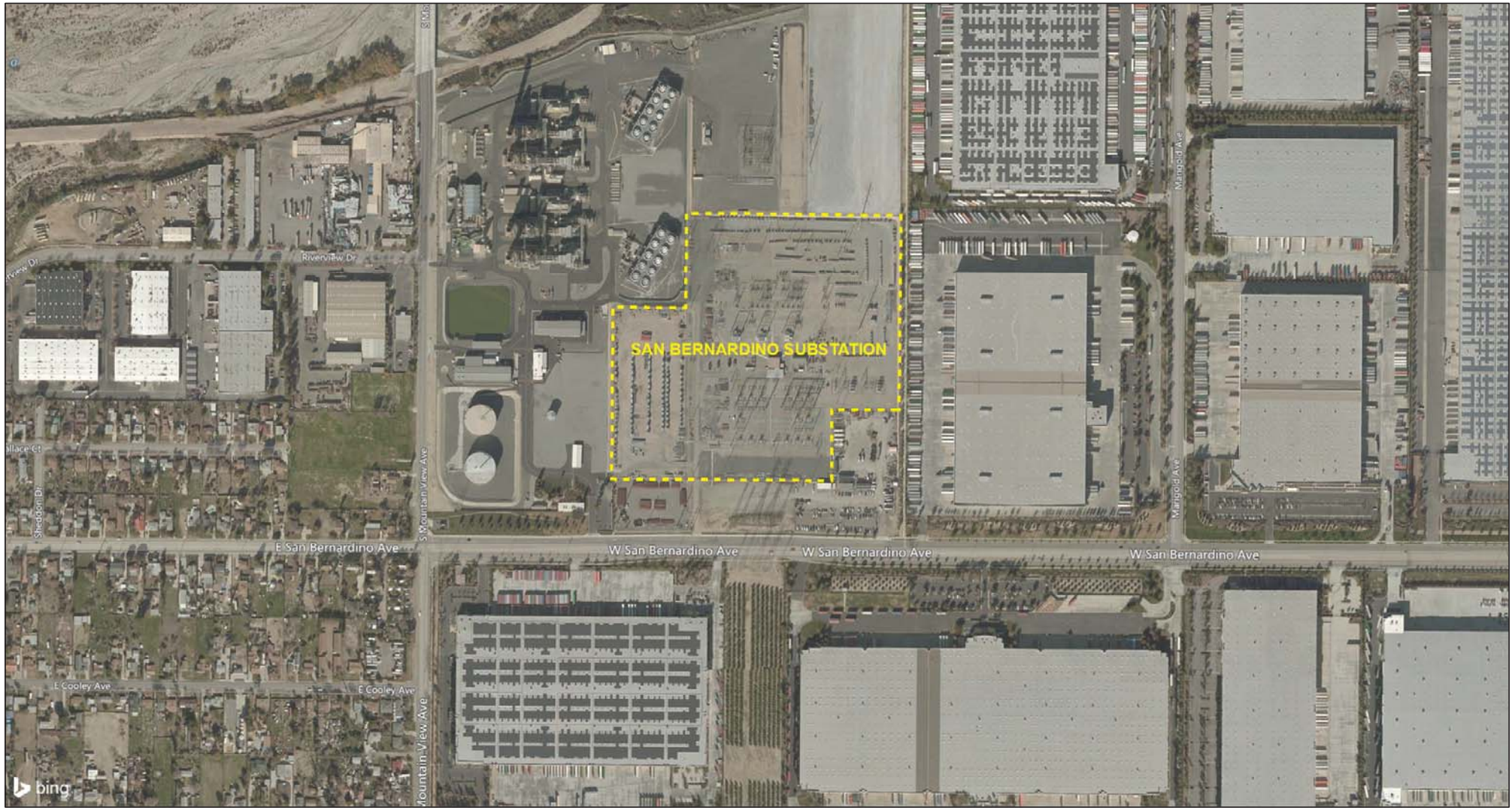





FIGURE 2a  
Site Photo  
March 2017

Southern California Edison  
West of Devers Upgrade Project  
Etiwanda Substation





**LEGEND**

 Existing Substation Area



0 200 400  
FEET

SCE, ESRI World Street Map, Bing Imagery, Aerial image © 2016 Google Earth

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FIGURE 3

San Bernardino Substation  
Page 3 of 6  
**DRAFT**  
Southern California Edison  
West of Devers Upgrade Project








FIGURE 3a  
Site Photo  
March 2017

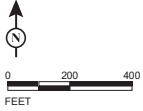
Southern California Edison  
West of Devers Upgrade Project  
San Bernardino Substation





**LEGEND**

 Existing Substation Area



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C:\WOD\GALT\WodMapFiles\Plans\NTPR\_Substations\_2017-03-30\Fig2\_WOD\_NTPR\_Substations\_DETAILS\_2017-05-04.mxd (5/4/2017)



FIGURE 4

Vista Substation

Page 4 of 6

**DRAFT**

Southern California Edison  
West of Devers Upgrade Project







FIGURE 4a  
Site Photo  
March 2017


Southern California Edison  
West of Devers Upgrade Project  
Vista Substation







**LEGEND**

 Existing Substation Area



0 200 400  
FEET

SCE, ESRI World Street Map, Bing Imagery, Aerial image © 2016 Google Earth

C:\WOD\GALT\Wod\MapFiles\Plans\NTPR\_Substations\_2017-03-30\Fig2\_WOD\_NTPR\_Substations\_DETAILS\_2017-05-04.mxd (5/4/2017)



FIGURE 5

El Casco Substation

Page 5 of 6

**DRAFT**

Southern California Edison  
West of Devers Upgrade Project



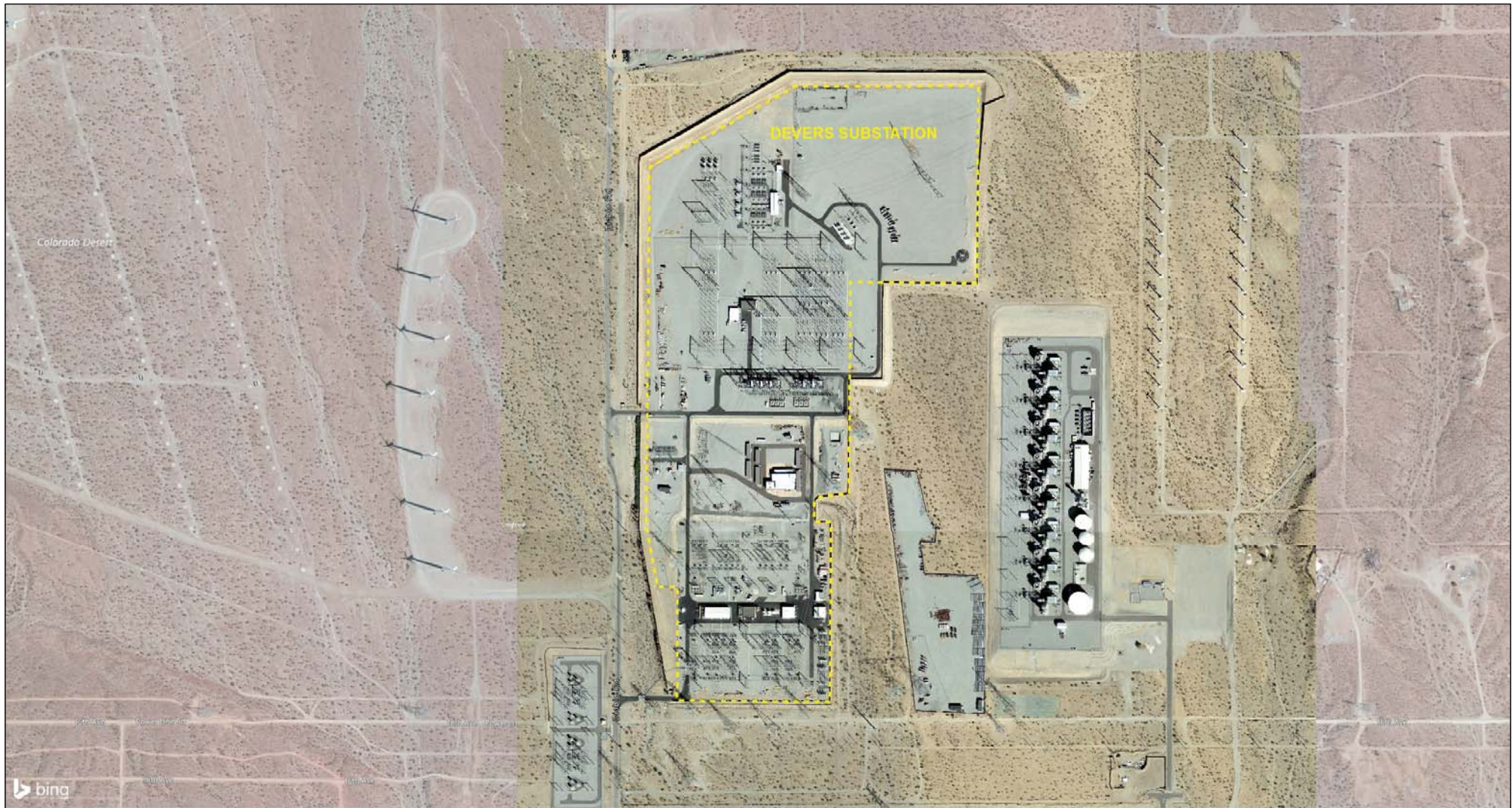





FIGURE 5a  
Site Photo  
March 2017

Southern California Edison  
West of Devers Upgrade Project  
El Casco Substation





**LEGEND**

 Existing Substation Area



0 200 400  
FEET

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C:\WOD\GALT\WodMapFiles\Plans\NTPR\_Substations\_2017-03-30\Fig2\_WOD\_NTFR\_Substations\_DETAILS\_2017-05-04.mxd (5/4/2017)



FIGURE 6

Devers Substation

Page 6 of 6

**DRAFT**

Southern California Edison  
West of Devers Upgrade Project



## Attachment A-4

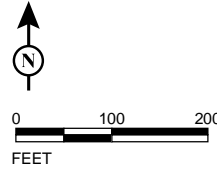
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Yards





bing



**LEGEND**

- Temporary Power Option
- Possible Ingress/Egress
- Material Yard
- Land Use Designation**
- Industrial
- Residential

SCE, ESRI World Street Map, Bing Imagery

\\galt\proj\SoCalEDISON\493461\MapFiles\Plans\NTPR\_MaterialYards\_2017-02-22\WOD\_NTPR\_CMY\_DETAILS\_2017-05-12\_1.mxd (5/15/2017)

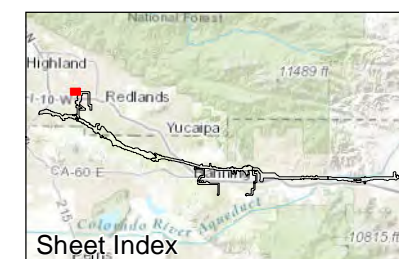
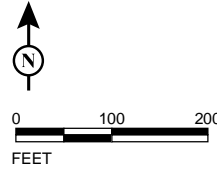
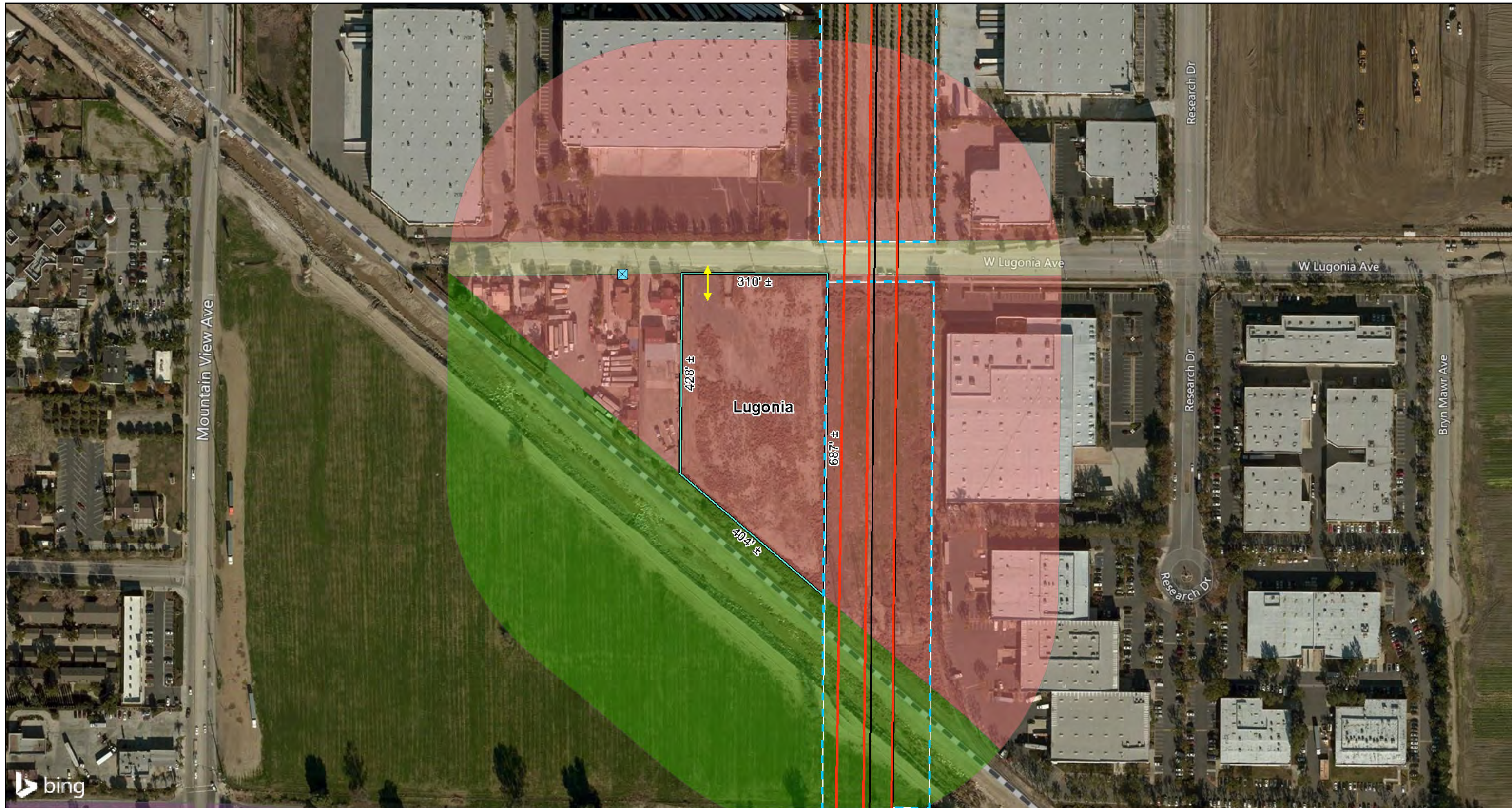


FIGURE 2

Southern California Edison  
West of Devers Upgrade Project  
**Mountain View No. 1 Material Yard**







**LEGEND**

- Temporary Power Option
- Possible Ingress/Egress
- Existing 220kV
- Proposed 220kV C/L
- Existing ROW
- Material Yard
- Land Use Designation**
- Agriculture
- Commercial
- Industrial

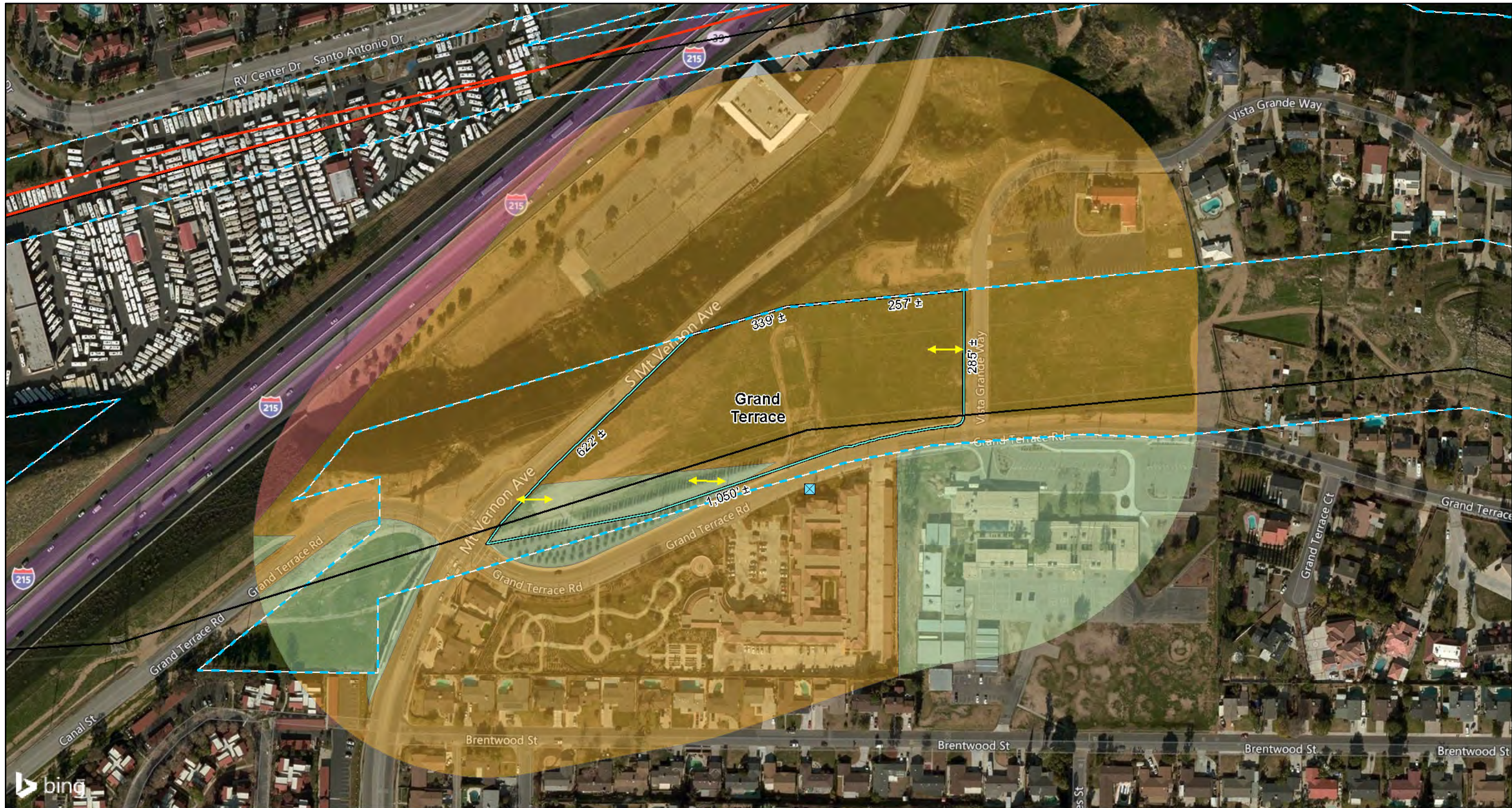


FIGURE 3

Southern California Edison  
West of Devers Upgrade Project  
**Lugonia Material Yard**

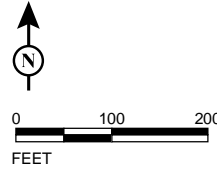






**LEGEND**

- |  |                         |                             |                   |
|--|-------------------------|-----------------------------|-------------------|
|  | Temporary Power Option  |                             | Material Yard     |
|  | Possible Ingress/Egress | <b>Land Use Designation</b> |                   |
|  | Existing 220kV          |                             | Commercial        |
|  | Proposed 220kV C/L      |                             | Public Facilities |
|  | Existing ROW            |                             | Residential       |



SCE, ESRI World Street Map, Bing Imagery

\\galt\proj\SoCalEDISON\493461\MapFiles\Plans\NTPR\_MaterialYards\_2017-02-22\WOD\_NTPR\_CMY\_DETAILS\_2017-05-12\_1.mxd (5/15/2017)

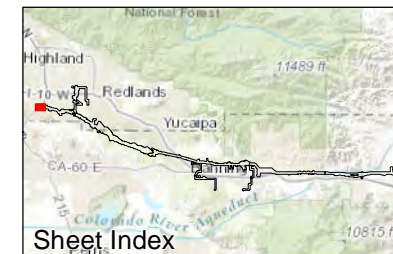
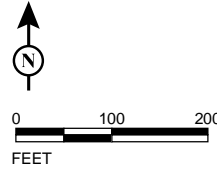
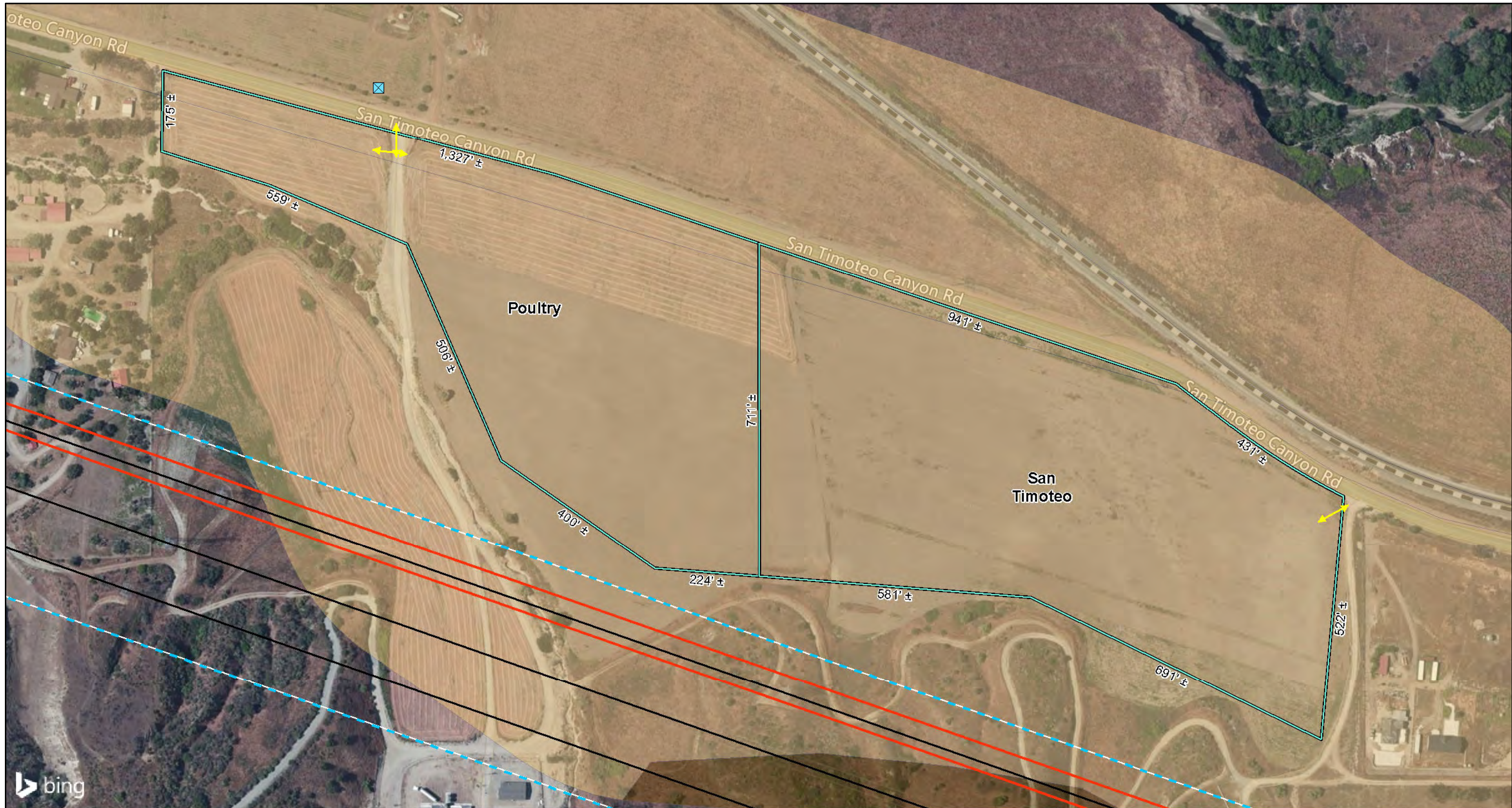


FIGURE 4

Southern California Edison  
West of Devers Upgrade Project  
**Grand Terrace Material Yard**







- LEGEND**
- ⊠ Temporary Power Option
  - ↔ Possible Ingress/Egress
  - Existing 220kV
  - Proposed 220kV C/L
  - ⋯ Existing ROW
  - ⬡ Material Yard
  - Land Use Designation**
  - Rural Mountainous
  - Rural Residential

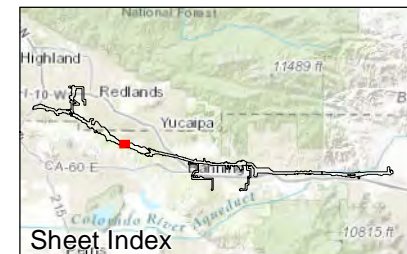


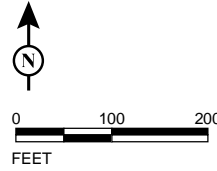
FIGURE 5

Southern California Edison  
West of Devers Upgrade Project  
**Poultry and San Timoteo Material Yards**





- LEGEND**
- Material Yard
  - Land Use Designation**
  - Public Facilities



SCE, ESRI World Street Map, Bing Imagery

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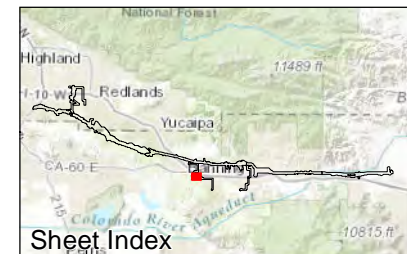


FIGURE 6

Southern California Edison  
West of Devers Upgrade Project  
**Beaumont No. 1 Material Yard**

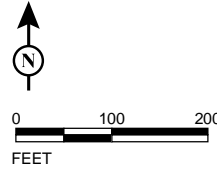






**LEGEND**

- Material Yard
- Land Use Designation**
- Public Facilities



SCE, ESRI World Street Map, Bing Imagery

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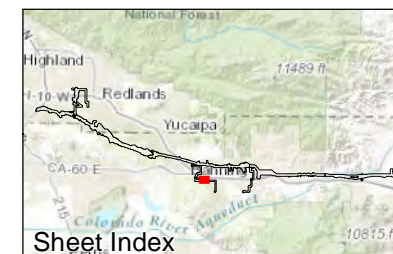
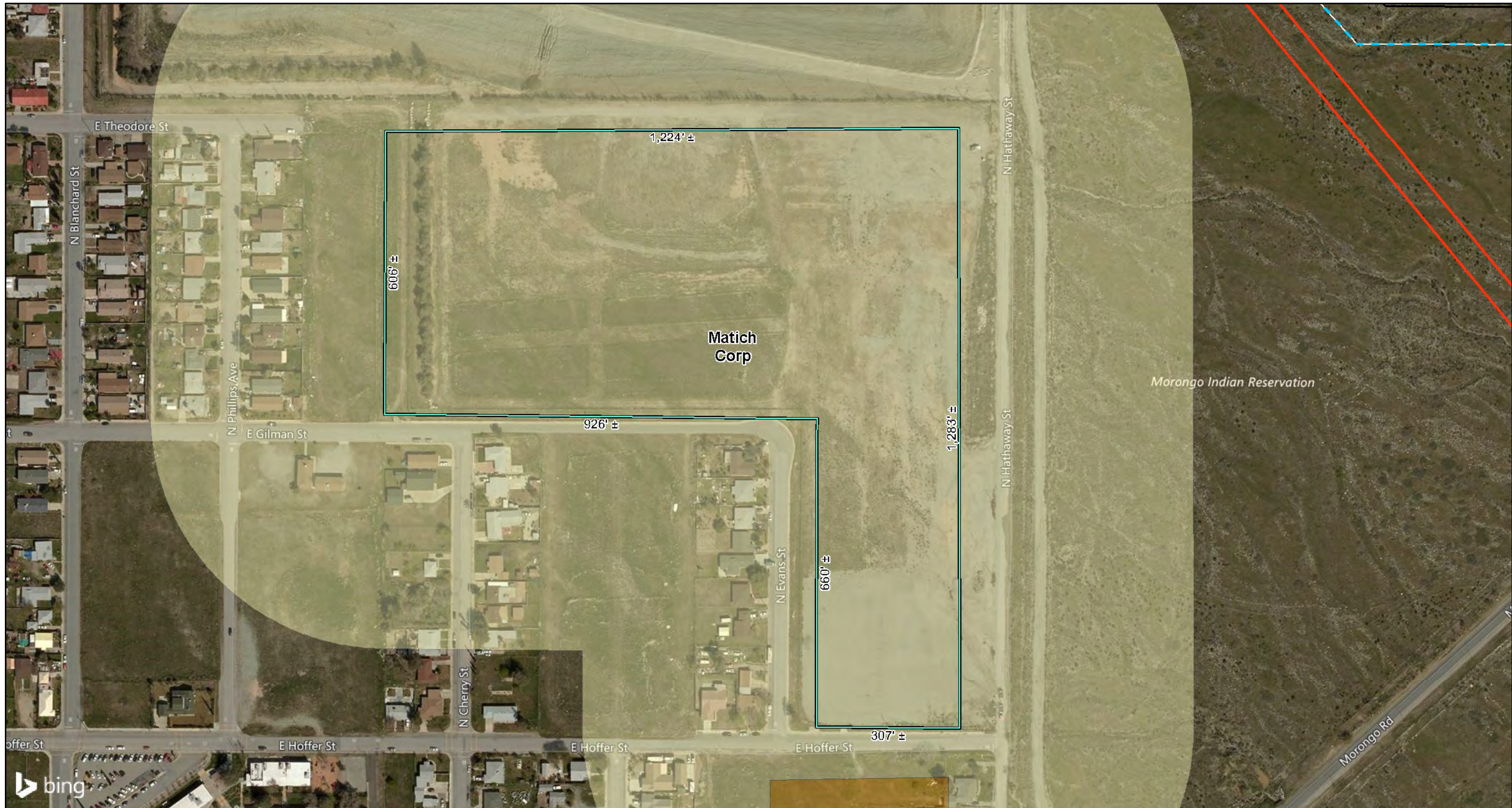


FIGURE 7

Southern California Edison  
West of Devers Upgrade Project  
**Beaumont No. 2 Material Yard**

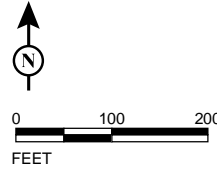






**LEGEND**

- Existing 220kV
  - Proposed 220kV C/L
  - - - Existing ROW
  - ▭ Material Yard
  - ▭ Residential
  - ▭ Industrial
- Land Use Designation**



SCE, ESRI World Street Map, Bing Imagery

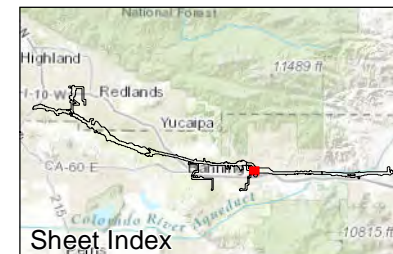


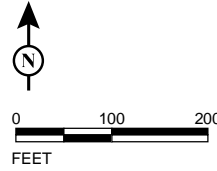
FIGURE 8

Southern California Edison  
West of Devers Upgrade Project  
**Match Material Yard**





- LEGEND**
- Material Yard
  - Land Use Designation**
  - Office
  - Residential



SCE, ESRI World Street Map, Bing Imagery

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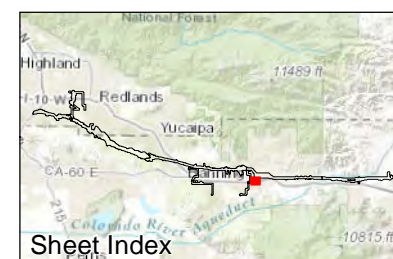
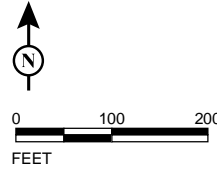


FIGURE 9

Southern California Edison  
West of Devers Upgrade Project  
Hathaway No. 2 Material Yard







**LEGEND**

- Existing 220kV
  - Proposed 220kV C/L
  - ▭ Material Yard
- Land Use Designation**
- ▭ Public Facilities

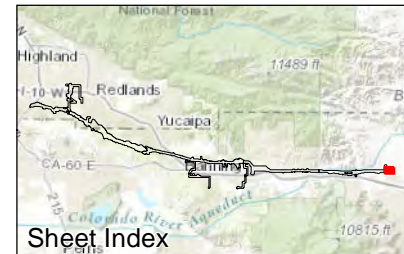


FIGURE 10

Southern California Edison  
West of Devers Upgrade Project  
**Devers Material Yard**





## **ATTACHMENT B**

---

### Final Helicopter Use Plan

# Helicopter Use Plan

## West of Devers Upgrade Project

*Prepared for:*

Southern California Edison

June 2018

REVISION 2

# Helicopter Use Plan Checklist

**Applicable Agencies:**

- |  |   |
|--|---|
| <input type="checkbox"/> Bureau of Indian Affairs                          | <input type="checkbox"/> Coachella Valley Conservation Commission         |
| <input checked="" type="checkbox"/> Bureau of Land Management              | <input type="checkbox"/> Morongo Band of Mission Indians                  |
| <input type="checkbox"/> California Department of Fish and Wildlife        | <input type="checkbox"/> Riverside County Regional Conservation Authority |
| <input checked="" type="checkbox"/> California Public Utilities Commission | <input type="checkbox"/> U.S. Fish and Wildlife Service                   |

**Applies in the Following Areas:**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> BLM Lands             | <input checked="" type="checkbox"/> CV-MSHCP         |
| <input checked="" type="checkbox"/> Morongo Reservation   | <input checked="" type="checkbox"/> WR-MSHCP         |
| <input checked="" type="checkbox"/> San Bernardino County | <input checked="" type="checkbox"/> Riverside County |

**Applies to the Following Project Components:**

- |  |  |   |
|--|--|---|
| <input checked="" type="checkbox"/> Transmission Line  | <input type="checkbox"/> Subtransmission | <input checked="" type="checkbox"/> Telecom |
| <input checked="" type="checkbox"/> Substations        | <input type="checkbox"/> Distribution    |   |
| <input checked="" type="checkbox"/> Construction Yards |  |   |

**Addresses the Following Measures:**

- MM T-7a: Final Helicopter Use Plan
- MM N-1a: BMPs for Construction Noise Management
- MM N-1b: Helicopter Noise
- MM WIL-1b: Wildlife Impact Avoidance and Minimization
- MM WIL-1c: Nesting Bird Management Plan



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1.3 Mitigation Measures.....	1-2
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1.4.3 Aviation Safety Plan .....	1-8
1.4.4 Aviation Communication Plan .....	1-9
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1.4.6 Congested Area Plan.....	1-9
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B Aviation Communication Plan	
C Aviation Risk Matrix	
D Nesting Bird Management Plan Helicopter Buffers	
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# Acronyms and Abbreviations

BLM	Bureau of Land Management
CAP	Congested Area Plan
CPUC	California Public Utility Commission
FAA	Federal Aviation Administration
gph	gallon(s) per hour
kV	kilovolt(s)
LZ	landing zone
PPE	personal protective equipment
Project	West of Devers Upgrade Project
PZ	Pick Zone
ROW	right-of-way
SCE	Southern California Edison

# 1 Project Information

Southern California Edison (SCE) proposes to construct the West of Devers Upgrade Project (Project) to increase the power transfer capability of the West of Devers 220-kilovolt (kV) transmission lines between Devers, El Casco, Vista, and San Bernardino substations. The Project is needed to facilitate the full deliverability of new electric generation resources being developed in eastern Riverside County, in an area designated by the California Independent System Operator for planning purposes as the Blythe and Desert Center areas. The Project, planned to be operational by 2021, would upgrade the existing West of Devers transmission line system by replacing the existing West of Devers 220-kV transmission lines and associated structures with higher-capacity transmission lines and structures and making telecommunication improvements.

## 1.1 Project Overview

The Project will upgrade the existing West of Devers system by replacing existing 220-kV transmission lines and associated structures with new, higher-capacity 220-kV transmission lines and structures, modifying existing substation facilities, removing and relocating existing subtransmission (66-kV) lines, removing and relocating existing distribution (12-kV) lines, and making various telecommunication improvements. In particular, the Project would:

- Upgrade substation equipment within SCE's existing Devers, El Casco, Etiwanda, San Bernardino, and Vista substations to accommodate continuous and emergency power on the upgraded West of Devers 220-kV transmission lines. Activities related to substation upgrades will take place within the existing, disturbed fence lines of the substations and are not addressed further in this Plan.
- Remove and upgrade the existing 220-kV transmission lines and structures primarily within the existing West of Devers corridor as follows:
  - Segment 1 would be approximately 3.5 miles long and extend south from the San Bernardino Substation to the San Bernardino Junction. It would include the following existing 220-kV transmission lines: Devers–San Bernardino, Etiwanda–San Bernardino, San Bernardino–Vista, and El Casco–San Bernardino.
  - Segment 2 would be approximately 5 miles long and extend west from the San Bernardino Junction to Vista Substation. It would include the following existing 220-kV transmission lines: Devers–Vista No. 1 and Devers–Vista No. 2.
  - Segment 3 would be approximately 10 miles long and extend east from the San Bernardino Junction to El Casco Substation. It would include the following existing 220-kV transmission lines: Devers–Vista No. 1, Devers–Vista No. 2, El Casco–San Bernardino, and Devers–San Bernardino.
  - Segment 4 would be approximately 12 miles long and extend east from the El Casco Substation to San Gorgonio Avenue in the City of Banning. It would include the following existing 220-kV transmission lines: Devers–Vista No. 1, Devers–Vista No. 2, Devers–El Casco, and Devers–San Bernardino.



- Segment 5 would be approximately 9 miles long and extend east from San Gorgonio Avenue in the City of Banning to the eastern limit of the Reservation Trust Lands of the Morongo Band of Mission Indians (Morongo Reservation) at Rushmore Avenue. It would include the following existing 220-kV transmission lines: Devers–Vista No. 1, Devers–Vista No. 2, Devers–El Casco, and Devers–San Bernardino.
- Segment 6 would be approximately 8 miles long and extend east from the eastern boundary of the Morongo Reservation to Devers Substation. It would include the following existing 220-kV transmission lines: Devers–Vista No. 1, Devers–Vista No. 2, Devers–El Casco, and Devers–San Bernardino.
- Remove a portion (approximately 2 miles) of the existing San Bernardino–Redlands–Timoteo and San Bernardino–Redlands–Tennessee 66-kV Subtransmission Lines from within the existing West of Devers right-of-way (ROW) and reconstruct as follows:
  - The relocated San Bernardino–Redlands–Timoteo 66-kV Subtransmission Line would be approximately 2 miles long and would reconnect to the San Bernardino–Redlands–Timoteo 66-kV Subtransmission Line inside Timoteo–Substation.
  - The relocated San Bernardino–Redlands–Tennessee 66-kV Subtransmission Line would be approximately 3.5 miles long and would reconnect to the San Bernardino–Redlands–Tennessee 66-kV Subtransmission Line at Barton Road.
- Remove a portion of the existing Dental and Intern 12-kV distribution circuits within the West of Devers ROW and relocate the circuits as follows:
  - The relocated Dental 12-kV Distribution Circuit would be approximately 1.5 miles long and would reconnect to the existing Dental 12-kV circuit.
  - The relocated Intern 12-kV Distribution Circuit would be approximately 2.25 miles long and would reconnect to the Intern 12-kV circuit.
- Install telecommunication lines and equipment for the protection, monitoring, and control of transmission lines and substation equipment.

## 1.2 Lead Agencies

Lead agencies have discretionary approval over the Project and are responsible for reviewing aspects of the measures documented in this Plan. The California Public Utilities Commission (CPUC) is the state lead agency responsible for compliance with the California Environmental Quality Act (CEQA). The Bureau of Land Management (BLM) is the federal lead agency responsible for compliance with the National Environmental Policy Act (NEPA). Identified materials or documentation will be provided to the CPUC and the BLM per the requirements of the mitigation measure.

## 1.3 Mitigation Measures

**MM T-7a:** Prepare and implement a final helicopter use plan. SCE and its contractor shall prepare and obtain approval of a Final Helicopter Use Plan prior to using helicopters to transport personnel, materials, or equipment for the deconstruction of existing project facilities or construction of new or

replacement project facilities. The Final Helicopter Use Plan shall draw upon protocols and methods used on previous transmission line projects and shall be submitted to CPUC and BLM for approval.

The Federal Aviation Agency (FAA) has jurisdiction over U.S. airspace, aircraft, aircraft operations, airports, and pilots. To the extent that they do not conflict with any FAA requirements, the following shall apply to helicopter use and be incorporated in the Final Helicopter Use Plan.

- All aircraft and pilots shall be in full compliance with applicable FAA requirements and standards.
- On the prior day, helicopter flight information shall be provided to CPUC/BLM monitors regarding the specific sites to be used for helicopter picks and the destination of the materials or assemblages being lifted out.
- Daily flight notifications shall be issued by e-mail prior to commencement of any project flight activity. Information provided in the e-mail shall include pilot name, contact number, aircraft type, aircraft registration number, aircraft color, work/flight area, beginning time, estimated completion time, and scope of work. This information will be provided to CPUC/BLM monitors as well.
- The specific facilities, towers, poles, and spans requiring deconstruction or construction using helicopters shall be identified.
- The yards to and from which helicopters would fly (fly yards) shall be identified and shall be of sufficient size to ensure safe operations, given the other activities occurring at the yards and the vicinity.
- Fly yards shall be sufficiently far from occupied residences to not create an unacceptable level of noise or dust.
- The means used for dust and noise control and for safe refueling shall be specified for each fly yard.
- Flight paths that minimize flights near schools, hospitals, nursing homes, and other sensitive group receptors shall be identified and followed.
- Except in an emergency, helicopters shall land or hover near the ground only in areas previously approved for landing, and all dust control and biological and cultural resource protection requirements shall apply.
- External loads will be secured by appropriate rigging, including boxing, netting, choking, and cabling, or other suitable means. Only qualified riggers shall prepare and attach external loads to helicopters, and rigging shall be appropriate to the nature of the load, including the use of devices as necessary to prevent materials being lost in flight. Where appropriate to reduce load in-flight spinning and movement, drag chutes will be attached to loads. The need for drag chutes will be determined by the pilot and rigging personnel, where appropriate. At locations where rigging is to occur, a sufficient supply of appropriate rigging and containment materials in good repair shall be on hand at all times.
- All aircraft are to be configured with weight sensors such that, when preparing to haul external loads, the pilot is able to determine the weight of the load being lifted.

- Yards or landing zones shall have a designated qualified individual managing the movement of aircraft in and out of the yard or landing zone when flight activity is high.
- Appropriate protocols for communication among pilots and between pilots and the ground shall be developed and implemented.
- A GPS-based data system shall be installed in each aircraft
  - The system shall identify for the pilot all project-approved project flight paths and those areas where overflights are restricted (such as seasonally restricted bird nesting areas and sensitive residential or institutional areas), and shall be updated as often as any flight restrictions are implemented or lifted.
  - The system shall automatically record and preserve flight data sufficient to identify the aircraft's flight path, including altitude above ground. The system shall be capable of providing the information required with regard to flight path and aircraft identifier, and provide a location "ping" no less frequently the once every 3 seconds. These data shall be collected daily and maintained by SCE or its contractor for a period of no less than six months and made available to CPUC or BLM upon request.

The Helicopter Use Plan shall be submitted to CPUC and BLM for review and approval at least 60 days prior to the use of helicopters on the project. Once the Helicopter Use Plan is made final, a copy shall be provided as a courtesy to each jurisdiction through which the Project passes.

**MM AQ-1c: Control helicopter emissions. Helicopter emissions shall be reduced by the following methods and measures:**

- Helicopter idling will occur only when necessary for safe operation and emergency readiness purposes.
- Helicopter operators shall use the smallest practical and available helicopter for each lift operation.
- Fugitive dust from helicopter rotor wash will be reduced through the implementation of the following measures:
  - The helicopter staging areas, that are not on existing paved airfields or other large paved sites, shall be treated with soil amendments (e.g., water, tackifiers, soil binders) that shall be applied at a frequency necessary to create and maintain surface soil crusts where rotor wash creates fugitive dust emissions;
  - Enough land area shall be obtained for each helicopter staging area not located on existing paved airfields or other large paved sites, so that rotor wash does not create visible fugitive dust emissions outside of the controlled staging area or ROW.
  - Helicopter operations will take flight paths (i.e. elevation above ground) that will eliminate dust emissions from rotor wash when travelling between the helicopter staging area and the work sites.



- The helicopter work sites shall be watered prior to helicopter visits. Alternatively, other soil stabilizers shall be applied at a frequency necessary to create and maintain a surface soil crust while helicopter visits are occurring at the work site.

**MM N-1a:** Implement best management practices for construction noise. SCE shall employ the following noise-control techniques, at a minimum, to reduce construction noise exposure at noise-sensitive receptors and to avoid possible violations of local rules, standards, and ordinances during construction:

- Construction noise shall be confined to daytime, weekday hours (7:00 a.m. to 6:00 p.m.) or an alternative schedule developed by SCE based on its coordination with the local jurisdiction...
- Construction traffic and helicopter flight shall be routed away from residences and schools, where feasible.

**MM N-1b: Implement a helicopter noise control strategy.** As part of the final Helicopter Use Plan, SCE shall include a helicopter noise control strategy that identifies the established helicopter flight corridors and minimum transit elevations above ground level to avoid noise-sensitive receptors on the ground. The noise control strategy shall prohibit helicopter hovering (greater than 15 minutes) within 250 feet of residences in any vertical or horizontal direction.

**MM WIL-1b: Minimize noise and vibration impacts...** To minimize disturbance to wildlife nesting or breeding activities in surrounding habitat, project-related helicopter use shall be avoided or managed to the extent feasible from February 1 to August 31. Unnecessary noise (e.g., blaring radios) shall be avoided...

**MM WIL-1c: Prepare and implement a Nesting Bird Management Plan...** The NBMP shall identify acceptable work activities within nest buffers (e.g., pedestrian access for inspection or BMP repair) including conditions and restrictions, and any monitoring required. The NBMP shall include pictorial representation showing buffer distances for ground buffers, vertical helicopter buffers, and horizontal helicopter buffers for nests near the ground and nests in towers...

Reporting. Throughout the construction phase of the project, nest locations, project activities in the vicinity of nests (including helicopter traces), and any adjustments to buffer areas shall be updated and available to CPUC monitors on a daily basis. All buffer reduction notifications and prompt notifications of nest-related non-compliance and corrective actions will be made via email to CPUC monitors. The draft NBMP shall include a proposed format for daily and weekly reporting (e.g., spreadsheet available online, tracking each nest). In addition, the NBMP shall specify the format and content of nest data to be provided in regular monitoring and compliance reports. At the end of each year's nest season, SCE will submit an annual NBMP report to the CPUC, BLM, CDFW, and USFWS. Specific contents and format of the annual report will be reviewed and approved by the CPUC and BLM in consultation with CDFW and USFWS.

## 1.4 Scope of Work

Project-related helicopter activities for the construction of the transmission lines will include the delivery of personnel, equipment, and materials from approved project material yards to approved structure sites. Helicopters will be based out of local airports and airfields located within the vicinity of the ROW and travel to approved material yards, work areas, and access roads. The use of mobile fueling equipment in approved yards and work areas will be operated in accordance with proper spill containment requirements identified in the Project Stormwater Pollution Prevention Plans, Hazardous

Materials and Waste Management Plan, and Emergency Response Plans. Dust-control measures will be implemented to assure that fugitive dust is not generated during helicopter operations, in accordance with the Project Fugitive Dust Control Plan. Helicopter use will not occur at night.

If a structure is located in terrain inaccessible by a crane, a helicopter may be used for the installation of some or all the structures. Helicopters also will be used for installation of aerial safety markers.

In the event that helicopter-based structure construction is deemed necessary, the following will apply:

1. Structure sections will be assembled at the construction staging yards or approved project disturbance areas and hauled by helicopter to the designated structure sites and lowered into place.
2. Structure site and foundation preparation equipment and materials will be ferried to the site by helicopter or delivered by vehicle.
3. SCE may temporarily stage materials and/or assemble structure sections at previously approved structure and wire pull sites that are road-accessible.
4. SCE will provide California Public Utility Commission (CPUC) monitors with a list of the areas to be used for this temporary purpose and identify the material or assemblages to be staged at each site and at the structure sites where the materials or assemblages will be used.

Summit Helicopter has been subcontracted for helicopter support by Barnard Construction. Barnard will identify the specific facilities, towers, poles, and spans requiring deconstruction or construction using helicopters, on the three-week look ahead and more specifically on the plan of the day, prior to flight operations. Summit Helicopter will provide aircraft and pilots in full compliance with applicable Federal Aviation Administration (FAA) requirements and standards. The aircraft will operate out of the following approved material yards: Mountain View Material Yard, Poultry Material Yard, Beaumont #2 Material Yard, Match Material Yard, and Devers Material Yard. The Grand Terrace Material Yard may also be used, upon CPUC approval.

A copy of the approved Final Helicopter Use Plan will be provided to each jurisdiction through which the project passes.

### 1.4.1 Helicopter Landing Sites

Landing and fueling close to worksites is necessary to increase efficiency, reduce helicopter flight time, reduce emissions, reduce fugitive dust, limit noise and impacts to sensitive receptors and biological resources, and increase the overall safety of helicopter-assisted work on the project. Helicopter operations will be limited to approved Project disturbance areas, including staging areas, ground locations near conductor and/or optical ground wire pulling, tensioning, and splice sites. In addition, helicopters will land within SCE ROWs, including approved access or spur roads. Temporary staging of materials and assembly of tower sections outside of approved construction work areas shall not occur without prior approval of CPUC or BLM, as appropriate.

Helicopter work sites will be cleared by environmental monitors and all disturbance areas will be appropriately marked to avoid impacts to biologically and culturally sensitive areas. The total time within any given hour of the day that the helicopters will be used at one location outside of the staging areas is expected to be approximately 15 minutes. Helicopters may travel back and forth between sites and staging yards multiple times within the hour.

Enough land area shall be obtained for each helicopter staging area not located on existing paved airfields or other large paved sites, so that rotor wash does not create visible fugitive dust emissions outside of the controlled staging area or ROW. Helicopter landing zones shall be no less than twice the overall length of the helicopter, in this case 66 feet.

Fly yards and landing zones will have a designated qualified individual managing the movement of aircraft in and out of the material yard or landing zone when flight activity is high. The approved fly yards are a sufficient size to ensure safe operations, given the other activities conducted at the yards and the vicinity. Helicopter landing sites and fly yards will be sufficiently far from occupied residences to avoid an unacceptable level of noise or dust.

Helicopter emissions will be reduced by the following methods and measures:

- Helicopter idling will occur only when necessary for safe operation and emergency readiness purposes.
- Fugitive dust from helicopter rotor wash will be reduced through implementation of the following measures:
  - The helicopter staging areas, that are not on existing paved airfields or other large paved sites, shall be treated with soil amendments (e.g., water, tackifiers, and/or soil binders, as appropriate) that shall be applied before takeoff and landings, at a frequency necessary to create and maintain surface soil crusts where rotor wash creates fugitive dust emissions.
  - Helicopter operations will take flight paths (i.e., elevation above the ground) that will eliminate dust emissions from rotor wash when traveling between the helicopter staging area and the work sites.

Helicopter noise will be reduced by implementing a noise control strategy, which prohibits helicopter hovering (greater than 15 minutes) within 250 feet of residences in any vertical or horizontal direction. Construction noise will be confined to daytime, weekday hours (7:00 a.m. to 6:00 p.m) or an alternative schedule developed by SCE based on its coordination with the local jurisdictions. Upon receipt of approval from local jurisdictions for work outside standard construction hours, alternative schedules will be made available to the CPUC prior to implementation. Construction traffic and helicopter flight will be routed away from residences and schools, where feasible.

### 1.4.2 Project Equipment

Summit Helicopter will supply light-duty and medium-duty helicopters. Table 1 provides a proposed equipment list:

<b>Table 1. Proposed Equipment List – Aircraft</b> <i>Barnard Helicopter Use Plan</i>				
<b>Type</b>	<b>Tail Number</b>	<b>Color</b>	<b>Size</b>	<b>Fuel Burn</b>
MD-530FF	N67FF	Grey/Black	Light Duty	32 gph
MD-530FF	N972BW	White	Light Duty	32 gph
MD-500D	N105JL	Grey/Black	Light Duty	24 gph
SK-58DT	N9VY	Orange	Medium Duty	100 gph
AS-350B2	214GH	Black	Light Duty	43 gph



Table 1. Proposed Equipment List – Aircraft <i>Barnard Helicopter Use Plan</i>				
Type	Tail Number	Color	Size	Fuel Burn
Note: gph = gallons per hour				

Helicopter operators will use the smallest practical and available helicopter for each lift operation.

#### 1.4.2.1 GPS-based Flight Tracking System

Cylinder-shaped horizontal and vertical default buffer distances will be established for helicopter construction activities, in accordance with the distances established in Table 4 of the Project Nesting Bird Management Plan (see figures in Appendix D). The environmental compliance team will monitor helicopter tracks (flight patterns and durations) daily to ensure compliance with established helicopter buffers and document non-compliances accordingly. SCE will retain helicopter track data and provide the tracks to the agencies upon request. The Aviation Communication Plan in Appendix B, describes the GPS-based data system requirements that shall be installed in each aircraft.

The species-specific default buffers provided in the Project Nesting Bird Management Plan will be adjusted based on site-specific, nest-specific observations in the field. Vertical species-specific default buffers account for the effects of rotor wash from the smaller helicopters proposed for Project use, which typically cause a down draft of 15 to 18 miles per hour (mph) at up to 150 feet.

#### 1.4.3 Aviation Safety Plan

The Aviation Safety Plan sets forth the scope of work, aviation personnel assigned to the project, and safety references, policies, and procedures to be used throughout the project.

Helicopter training will be conducted for personnel assigned to work with helicopters in advance of helicopter operations on the project. The number of aircraft needed to support the project will vary based on schedule needs. This training will be conducted by the helicopter pilot or a specialist from Summit Helicopter. All training will be documented and copies available on the Project document control software, Procore.

External loads will be secured by appropriate rigging, including boxing, netting, choking, and cabling, or other suitable means. Only qualified riggers shall prepare and attach external loads to helicopters. Rigging shall be appropriate to the nature of the load, including the use of devices as necessary to prevent materials being lost in flight. When necessary to reduce load in-flight spinning and movement, drag chutes will be attached to loads. The need for drag chutes will be determined by the pilot and rigging personnel.

Acceptable load weights, calculated by the pilot and based on the current aircraft and pilot capability, will be given to the ground personnel responsible for building the external loads. Built loads shall be weighed and the weight communicated to the pilot prior to attachment to the helicopter. In addition, all aircraft will be configured with weight sensors such that, when preparing to haul external loads, the pilot is able to determine the weight of the load being lifted.

An Aviation Safety Plan is contained in **Appendix A**.

#### 1.4.4 Aviation Communication Plan

The Aviation Communication Plan outlines how reliable communication will be established and maintained throughout the project. The Aviation Communication Plan is attached as **Appendix B**.

#### 1.4.5 Aviation Risk Matrix/Job Hazard Analysis

An Aviation Risk Matrix identifies certain risks associated with helicopter operations engaged in powerline work and offers suggested mitigation measures to help reduce the likelihood of an accident or incident. A Risk Matrix is attached as **Appendix C**.

#### 1.4.6 Congested Area Plan

A Congested Area Plan (CAP) is required by the FAA if helicopter operations are taking place in any congested area accessible by the non-participating public.

Helicopter external load operations will not be conducted over homes, businesses, or public areas without mitigation measures in place to exclude any non-participating public from entering the area. Flight operations will be minimized near schools, hospitals, nursing homes, and other sensitive group receptors. Except in an emergency, helicopters shall land or hover near the ground only in areas previously approved for landing, and all dust control and biological and cultural resource protection requirements shall apply. The noise control strategy shall minimize helicopters hovering within 250 feet of residences in any vertical or horizontal direction. CAPs will follow the FAA guidance contained in 8900.1, Volume 3, Chapter 51, Part 133 External Load Operations, Section 6. CAPs will be filed with the FAA and copies will be submitted on Procore. Approved CAPs will be made available to the CPUC prior to implementation.

#### 1.4.7 Flight Paths

Helicopter flight paths will, at a minimum, maintain the necessary elevation to avoid hazards and impacts to noise sensitive receptors, dust sensitive receptors, and environmentally sensitive areas while in transit.

Helicopter flight paths will typically be a direct path from the material yard to the construction site(s) identified on the Plan of the Day, avoiding all identified environmentally sensitive area helicopter buffers. Flight activities will be minimized near schools, hospitals, nursing homes, and other sensitive group receptors, to the extent feasible.

Flight activities associated with the scheduled work activities will be communicated with Southern California Edison Air Operations, as required.

#### 1.4.8 Traffic Control Plan

For the safety and welfare of the general public, project aircraft will avoid, when possible, ferrying materials and equipment over roads and other crossings. However, ferrying of material and equipment over roads and crossings may be required on the project. Under these circumstances, appropriate traffic Comment addressed. control measures and permits will be implemented at the road or crossing. Depending on the type and size of road and/or crossing, flaggers, signs, traffic control, and local law enforcement and or California Highway Patrol will be used to ensure that public safety is not compromised. The communication requirements for coordinating road closures are outlined in Appendix B, the Aviation Communication

Plan. Approved traffic control plans and associated permits will be made available to the CPUC prior to implementation.



## 2 References

Barnard Companies, Inc. 2018. *Emergency Response Plan*. West of Devers Upgrade Project Riverside and San Bernardino Counties, California. Prepared for Southern California Edison. Version 1. January.

California Public Utilities Commission (CPUC). 2015a. *Final Environmental Impact Report (FEIR) Southern California Edison's West of Devers Upgrade Project*. SCH #2014051041. December.

California Public Utilities Commission (CPUC). 2015b. *Nesting Bird Management Plan*. West of Devers Upgrade Project. August.

CH2M HILL Engineers, Inc. (CH2M). 2017. *Hazardous Materials, Waste Management, and Soil Management Plan*. West of Devers Upgrade Project Riverside and San Bernardino Counties, California. Prepared for Southern California Edison. Final. September.

CH2M HILL Engineers, Inc. (CH2M). 2018. *Fire Management Plan*. West of Devers Upgrade Project Riverside and San Bernardino Counties, California. Prepared for Southern California Edison. Final. March.

Southern California Edison (SCE). 2017a. *Storm Water Pollution Prevention Plan (SWPPP)*. Prepared for Construction Activities at: Southern California Edison (SCE) West of Devers Upgrade Project EPA Jurisdictional Area. Prepared by Geosyntec Consultants. May.

Southern California Edison (SCE). 2017b. *Storm Water Pollution Prevention Plan (SWPPP) per SWRCB Order No. 2009-0009-DWQ Amended by 2010-0014-DWQ and 2012-0006-DWQ for West of Devers Upgrade Project Colorado River Basin Regional Board Jurisdictional Area*. Prepared by Geosyntec Consultants. August.

Southern California Edison. 2017c. *Storm Water Pollution Prevention Plan (SWPPP) per SWRCB Order No. 2009-0009-DWQ Amended by 2010-0014-DWQ and 2012-0006-DWQ for West of Devers Upgrade Project Santa Ana Regional Board Jurisdictional Area*. Prepared by Geosyntec Consultants. August.

Appendix A  
Aviation Safety Plan

## AVIATION SAFETY PLAN

Project Description and Emergency Contacts			
<b>Project Number</b>	A17-3742		
<b>Project Start / End Dates</b>	Start: October 1, 2018	Complete: 2022	
<b>Project Location</b>	Corridor Between Devers and Vista Substations		
<b>Scope of Work</b>	<p>The project will consist of removing and replacing approximately 48 corridor miles of existing 220-kV transmission lines with new double-circuit 220-kV transmission lines, between the existing Devers Substation (near Palm Springs), El Casco Substation (Riverside County), Vista Substation (in Grand Terrace), and San Bernardino Substation. Helicopters will be used to fly people and material to many of the structures for the associated work within this package to improve efficiencies in production and minimize the environmental impact of the project.</p> <p>Barnard Construction has contracted with Summit Helicopter to provide helicopter support for this project. Summit Helicopter will provide aircraft and pilots in full compliance with applicable FAA requirements and standards. The aircraft will operate out of designated fly yards. Each fly yard will be approved for use by the CPUC, cleared by Environmental, and prepared for use (cleared) by civil contractors. Once prepared, these yards will be utilized as the work progresses.</p> <p>All provisions contained in this manual must be followed to ensure the safety of the workers.</p>		
<b>FOR ALL EMERGENCIES CALL: 911</b>			
<b>Summit Helicopter Emergency Contact number: (818) 890-0903</b>			
<b>For all incidents, injuries, property damage, near-misses, work-induced illness or chemical over-exposures, the following personnel MUST be immediately contacted upon scene stabilization, but in all cases within one hour:</b>			
Project Personnel	Name	Phone Number(s)	Email
Summit Contract Manager	Bill Nichols	(727) 858-8079	<a href="mailto:bnichols@welkaviation.com">bnichols@welkaviation.com</a>
Summit Project Environment, Safety, and Health Point of Contact	Michael Peters	(503) 866-2428	<a href="mailto:mpeters@summithelicopter.com">mpeters@summithelicopter.com</a>
Company Safety Manager	Robby Lenzer	(503) 396-0518	<a href="mailto:rlenzer@summithelicopter.com">rlenzer@summithelicopter.com</a>



## Local Hospital Facilities:

Crew Foreman will be responsible for identifying the nearest hospital facility for their crew each day. This location will be reviewed with the crew during their tailboard safety meeting and noted on the tailboard sign-in sheet.

- Loma Linda University Medical Center (Venomous Snake Specialty Center)  
11234 Anderson Street, Loma Linda, CA 92354  
Phone – (877) 558-6248 Emergency - 911
- Arrowhead Regional Medical Center  
400 N Pepper Avenue, Colton, CA 92324  
Phone (909) 580-1000 Emergency - 911
- Desert Regional Medical Center (Anti-Venom Available)  
1150 N Indian Canyon Drive, Palm Springs, CA 92262  
Phone – (760) 323-6511 Emergency - 911

## Daily Work Procedure

Crew will review this document and all crewmembers will sign off that they have reviewed and will comply with the contents therein. A meeting will be held prior to any work activity where all project personnel will review this Aviation Safety Plan. This will allow all crewmembers to ask any questions and assure the Project Leadership that all personnel understand the breadth and scope of the plan. A sample of the Daily Tailboard Form is on page A-5 and will be utilized to document daily briefings.

1. Crew will conduct a Daily Tailboard at the Jobsite.
2. The pilot and foreman will conduct the job briefing and will document the briefing on the Summit Tailboard Sheet. All participating employees will sign off on the Tailboard Sheet indicating that they understand the work tasks for the day.
3. Safety of Flight will be determined by Summit Pilot in command.
4. Safety of Work determined by Barnard foreman.
5. Crew, Materials, Tools & Equipment transported to LZ by Barnard crew members.
6. Helicopter arrives after LZ is set up and secured and watered.
7. Crew will confirm line outage and status of lines and equipment with Barnard and/or SCE. Do not proceed with any work activity without line outage and status of lines and equipment authorization. All crewmembers will be informed as to the status of the line and no work will be performed until the line status information is clearly disseminated to the crew.

Helicopter line work shall only be performed by line workers that have been trained in the work activity they are being asked to perform and have demonstrated proficiency in performing the task.

If at any time before or during the performance of the work, the helicopter line worker, the supervisor, or the pilot feels that dangerous or unsafe conditions exist that could affect the safety of the operation;

they are required to suspend the helicopter operations until those concerns have changed, and have been addressed and corrected. These concerns could include, but are not limited to, the following:

- Inclement weather conditions
- Insufficient clearances
- Exceeding helicopter load limitations
- Structure or conductor damage that causes safety concerns
- Any other conditions that would adversely affect the safety of the operation

## General Briefing

- Tailboard briefings will occur daily or more often if the scope of work changes sufficiently to warrant.
- Review assigned duties and tasks.
- Discuss anticipated site conditions.
- Review required personal protective equipment (PPE) and ensure all crewmembers have what they need.
- Review stop work authority.
- Review any Job Hazard Analysis.
- Discuss any biological hazards present on-site.
- Discuss any concerns pertaining to crewmember fatigue.
- Discuss emergency procedures and communication plans.
- Review location of any fire extinguishers, first aid kits, sat phones, etc.
- Review location and use of spill containment.
- Review lessons learned from previous days.
- Confirm Everyone is comfortable with the work plan for the day.
- Other \_\_\_\_\_
- Other \_\_\_\_\_





**WORK METHODS REFERENCES**

<b>Task References - Detailed</b>	
Fueling	Work Methods 300
External Load	Work Methods 400
EHL & HEC	Work Methods 600
Wire Pulling	Work Methods 700

**EMERGENCY EQUIPMENT**

<input checked="" type="checkbox"/> Emergency Eyewash	Located on fuel service vehicles.
<input checked="" type="checkbox"/> First Aid Supplies	Located on aircraft and fuel service vehicles.
<input checked="" type="checkbox"/> Fire Extinguishers	Located on aircraft and fuel service vehicles.
<input checked="" type="checkbox"/> Spill Containment/Clean-up	Spill kits located on fuel service vehicles.
<input checked="" type="checkbox"/> Pilot's PPE	Flight Helmets, Nomex Clothing, Nomex Gloves, Boots.
<input checked="" type="checkbox"/> Mechanics PPE	Head Protection, Hearing Protection, Eye Protection, FR Clothing, Boots.
<input checked="" type="checkbox"/> Fuelers PPE	Head Protection, Hearing Protection, Eye Protection, FR Clothing, Boots.
<input type="checkbox"/> Other:	
<input type="checkbox"/> Other:	

**COMMUNICATION**

**Safety Data Sheet (SDS) Location:**

SDS sheets are located on fuel trucks and at Company hangar facilities

**Method of notifying affected Summit Helicopter employees:**

Personnel that may come in contact with chemicals or substances for which SDSs are kept on file are trained in the location, contents, and mitigation measures contained in SDSs.

## Pilot Responsibility and Authority

It is important to understand a pilot's legal responsibility for safety. Pilots are licensed professionals and, as such, have *command* of the helicopter. Federal Aviation Regulations (FARs) document the following rules:

- **FAR 91.3a** – The pilot in command of an aircraft is directly responsible for, and is the final authority, as to the operation of that aircraft.
- **FAR 91.8** – No person may assault, threaten, intimidate, or interfere with a crew member in performance of the crewmen's duties aboard an aircraft being operated.

## Personal Protective Equipment

### Hard Hats

It is critical that all head protection be equipped with straps that will prevent them from blowing off during helicopter work activity. These straps must be used by the helicopter line workers and all support personnel while the helicopter is operating, to prevent them from coming off and contacting the helicopter rotor blades. Only fly helmets may be worn by linemen. Hardhats, even with chin straps, may not be worn while riding on the helicopter skid.

### Eye Protection

When working near helicopters, all personnel should wear safety glasses equipped with side shields to prevent debris from blowing into their eyes from the rotor wash caused by the helicopter.

### Hearing Protection

Since helicopters produce a high level of mechanical noise during operation, all helicopter line workers and support personnel should always wear hearing protection when working near helicopters.

### Inspections

Prior to transporting any workers to a work location, a thorough inspection shall be performed by the line crew to identify any hazardous conditions that would affect the safety of the workers. If any condition is discovered during the inspection that might jeopardize safety or cause concern for the activity to be safely performed, the condition must first be corrected or safeguards put in place that would eliminate or control the hazard, before transporting the worker. If the hazardous condition cannot be corrected or eliminated, an alternate method of accessing the work location shall be used.

### Harnesses

All harnesses used for supporting line workers from a helicopter shall meet all requirements by the FAA and Federal U.S. Occupational Safety and Health Administration regulations covered in *Code of Federal Regulations* 1926 subpart M (fall protection). They shall be properly fitted and attached to the helicopter load line with approved connections that allow for an easy connect and disconnect.

### Tools

Helicopter line workers shall not carry any tools on their tool belts unless the tools are secured by a lanyard that would prevent them from falling to the ground. Tools carried on the tool belt should not



impede the workers movement or pose a hazard of hanging-up on the structure while being placed on or removed from the structure.

### Pre-Job Briefing

When helicopters and line crews are working together, a tailboard or pre-job briefing is required. One portion is conducted by the pilot-in-command of the helicopter, and one portion is conducted by the person-in-charge of the line work activities (foreman or supervisor).

All workers involved with helicopter operations or who will be working near helicopter operations must be present during this pre-job briefing, this includes safety, bio, or inspection personnel. The pilot's pre-job briefing portion should cover all aspects of the flight operations, followed by the person-in-charge's pre-job briefing, covering all aspects of the line work to be performed.

- **Pilot-in-Command Pre-Job Briefing**

The Pilot's pre-job briefing should include, as a minimum, the following items as they pertain to the flight operations for the work to be performed:

- Risk assessment
- Work objectives
- Terrain
- Weather conditions
- Landing zones
- Individual responsibilities for:
  - Foreman (supervisor)
  - Pilot
  - Landing zone crew
  - Ground personnel
  - Line workers
- Hazards
- Review of awareness items
- Emergency planning
- Affirmative action in the event of an accident or helicopter down
- Communication requirements
- Equipment and rigging

- **Foreman Pre-Job Briefing**

The person-in-charge of the line work activities pre-job briefing should include at a minimum:

- Circuits that will be worked on and their voltage class
- Line energized or de-energized:
  - Energized:
    - Distances that must be maintained (minimum approach distances)
    - Where on the structure workers can safely be placed
  - De-energized:

- Clearance points on the circuit
  - Where grounds are to be installed
  - Fault duty of the circuit
- Personnel work assignments
  - Any hazards that are present and how those hazards will be dealt with:
    - Is there damage on any of the structures, conductors, or insulators?
    - Are there bird guards or overhead ground wires on any structures that would pose a concern?
    - Are there any energized circuits on the structure or nearby that would be of concern?
    - Are there any tall structures or trees nearby that would be of concern?
    - Are the clearances adequate to safely insert the worker?
  - PPE that will be required to safely perform the work
  - Loads and weights they will be dealing with
  - Emergency rescue plan and assignments
  - Affirmative action in the event of an accident or helicopter down
  - Contact information in the event of an emergency

## Helicopter Safety

### All Employees

Employees shall notify Summit Helicopter, the pilot, or other crew members, and the job supervisor if they observe any work practices that are considered unsafe or in violation of safety rules or regulations.

### General Requirements

Working near a helicopter exposes workers to risk and hazards that are outside of the normal hazards associated with line work. It is important that all personnel be aware of these hazards and take appropriate measures to protect themselves and others from these hazards. This section will cover the hazards associated with this type of work and the measures to take to protect from them.

### Landing Zones

Landing zones (LZs) should be as close to the worksite as conditions will allow.

When selecting the landing zone, make no compromises as to the suitability of the site in an effort to place the landing zone as close as possible to the work location.

- Temporary staging of materials and assembly of tower sections outside of approved work areas shall not occur without prior approval of CPUC or BLM, as appropriate.
- The yards to and from which helicopters will fly shall be identified and approved prior to use and shall be of sufficient size to ensure safe operations.

Summit is responsible for determining suitable LZs and Barnard is responsible for obtaining approval prior to beginning their use. CPUC/BLM approval for all landing sites will be obtained prior to their use.

The LZ (s) should also be jointly inspected by the helicopter pilot and the person-in-charge prior to their use to confirm that they are suitable to ensure the safety of the helicopter and all involved personnel. The pilot will have the final say in approving the proposed landing zones during this joint inspection, and if the pilot feels that a landing zone is not suitable, an alternative previously approved landing zone will be located that the pilot feels is suitable. If it is not previously approved, then it will be identified and submitted for approval.

Landing zones require at a minimum, two times the width of the helicopter rotor blades.

The following items should be considered when selecting the LZ's:

\*Note specific information about any of the items listed below and any hazards that may be associated with their presence:

- Nesting bird buffers (GPS files to be provided by Barnard Environmental/CH2M HILL Engineers, Inc. [CH2M])
- Trees
- Fences
- Loose debris on the ground
- Dry grass or weeds
- Livestock nearby
- Adjacent pole or tower lines
- Line crossings
- Communication structures
- Slope of the terrain
- Large rocks present
- Wind direction
- School located nearby
- Near or easily accessible to public (Will guards or barricades be needed to keep people clear?)
- Houses, businesses, or roads that will be in the flight path
- Does the landing zone permit take-off and landing into the prevailing winds?
- Is the selected landing zone relatively level? Is it possible to use hilltops or ridges?
- Is the ground relatively stable and does it provide good footing for the ground crew and equipment?
- Will a water truck be needed to wet down the LZ to control the dust in the area?
- Does the landing zone permit access for support vehicles if needed?

## Approaching and Departing the Helicopter

Most accidents involving helicopters occur when people approach the helicopter improperly and are hit by the rotor blades. Flying debris is also a cause of injuries when people are too close to a helicopter and aren't wearing appropriate eye protection. Keep all unnecessary personnel at least 100 feet back from the helicopter at all times.

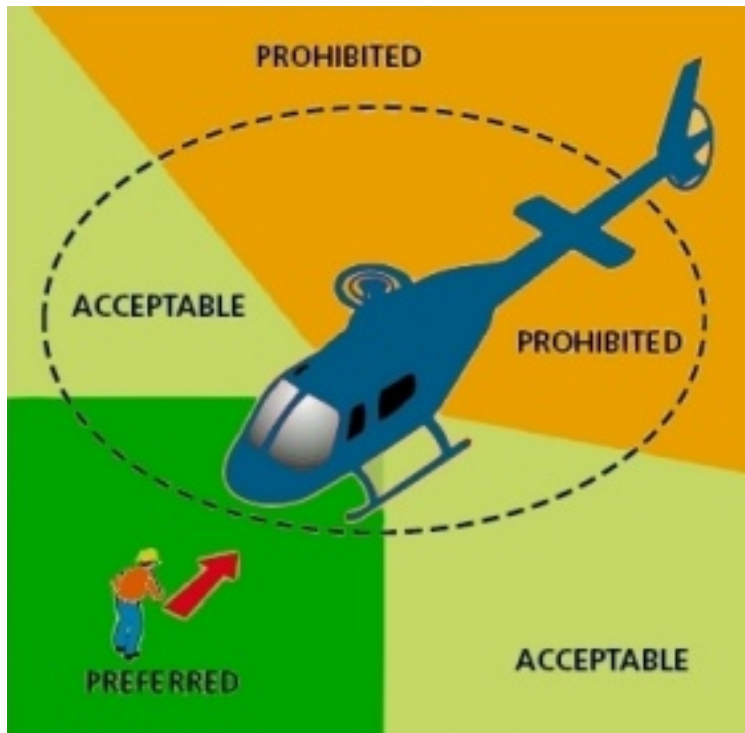
### Approaching and Departing

The following rules apply whenever approaching a helicopter while the rotors are turning:

1. The helicopter pilot is in charge of the flight operations involving the helicopter. Always follow the pilot's instructions.



2. Wait at the end of the designated landing zone and face the front of the helicopter. When the pilot lands in the center of the LZ, everyone should be easily visible to the pilot.
3. Approach and leave the helicopter only after the pilot has given you the OK to do so.
4. Always approach and leave the helicopter from the area within 180° in front of the doors where the pilot can see you.
5. Never approach the helicopter when the main rotors are turning unless signaled to do so by the pilot.
6. Always wear approved eye protection and hard hat with chin strap in place.
7. Walk under main rotor blades with caution and in a crouched position with your head low.
8. On sloping or irregular terrain, approach the helicopter from the area with the greatest clearance from the rotor blades (the low ground).
9. Never walk up a slope when departing from a helicopter.
10. Do not assist the helicopter crew in any way unless specifically asked to do so.
11. Personnel shall not lift their arms or carry objects above waist level, and must always carry objects in a horizontal plane when approaching or working near a helicopter.



**Note:** NEVER slam the doors on the helicopter.

## Boarding the Helicopter

Personnel boarding a helicopter shall be aware of and observe the following rules:

- Personnel cleared to board the helicopter shall wait for the “safe to board” signal from the pilot before approaching the helicopter.
- Personnel cleared to board shall approach within the pilot’s normal field of view unless otherwise directed by the pilot.
- Personnel approaching the helicopter in motorized vehicles/or equipment shall never drive under the rotor blades.
- Personnel shall exercise extreme caution when seated in the front seat of the helicopter to ensure they do not touch the helicopter controls or interfere with the pilot in any way.
- Personnel shall ask the pilot where to sit (preferably during pre-flight briefing) when boarding large helicopters where the pilot is separated from the passengers.
- Personnel shall wear seat belts and/or shoulder harnesses at all times while on board operating helicopters.
- Personnel on board the helicopter shall securely latch their doors before take-off and the pilot will ensure that all doors are latched correctly.

## Fueling

All workers other than those involved with the fueling operation shall remain clear of helicopters and fuel trucks during fueling operations. The following rules shall apply:

1. Helicopters will be refueled at approved construction yards, helicopter staging areas, approved construction work areas, or local airports.
2. In designated refueling areas, spill prevention measures will be used to prevent chemicals from contacting the ground.
3. Safety precautions will be used during refueling of helicopters to prevent fuel and spill prevention equipment from interfering with the operation of the helicopter.
4. Absorbent pads and trays will be readily available in all designated refueling areas.
5. Smoking, open flames, or other sources of ignition shall only occur in designated areas, in accordance with the West of Devers CPUC approved Fire Management Plan.
6. Fueling systems must be securely bonded to the helicopter before and during fueling operations to lessen the possibility of static electrical discharge.
7. Fueling will not be permitted with passengers onboard the helicopter
8. There must be at least one 20-pound dry chemical fire extinguisher, rated for B and C type fires, at each fueling location.



9. Spilled fuel must be cleaned up immediately, in accordance with the West of Devers CPUC approved Hazardous Materials Management Plan. Discontinue all fueling operations until after clean-up and/or wash down.
10. Fueling operations must be conducted with proper Project Storm Water Pollution Prevention Plan best management practices in place, at least 100 feet from riparian/riverine areas and sensitive habitats and at a minimum of 50 feet from any building or 100 feet from any other aircraft.

**Note:** Fueling can only be performed by Summit Helicopter employees that are trained and qualified for fueling.

## COMMUNICATIONS

Good communications must be maintained at all times between the helicopter pilot, landing zone personnel, supervisor, and the helicopter line worker. The helicopter must be equipped with a 2-way radio that is capable of operating on a radio frequency used by the line crews, landing zone coordinator, and supervisor.

Direct communication between the pilot and line workers may be in the form of hand signals, head signals, radio communications, or direct verbal communication. For some helicopter line work activities, special radio communications equipment may be necessary to ensure the safety of the operation.

The following lists the communications methods that are approved for use for the various purposes shown:

- Cellular Phones. Cellular phones may be used for the following purposes:
  - Contacting Emergency Services
  - Communicating with line switching center
  - Notifying headquarters of an accident
- 2-Way Radios. 2-way radios can be used for the following purposes:
  - Communicating with air traffic control
  - Communicating with line switching center
  - Communicating with all personnel involved in the helicopter operation, including:
    - Pilot
    - Landing zone
    - Line workers
    - Supervisor

## Head Signals

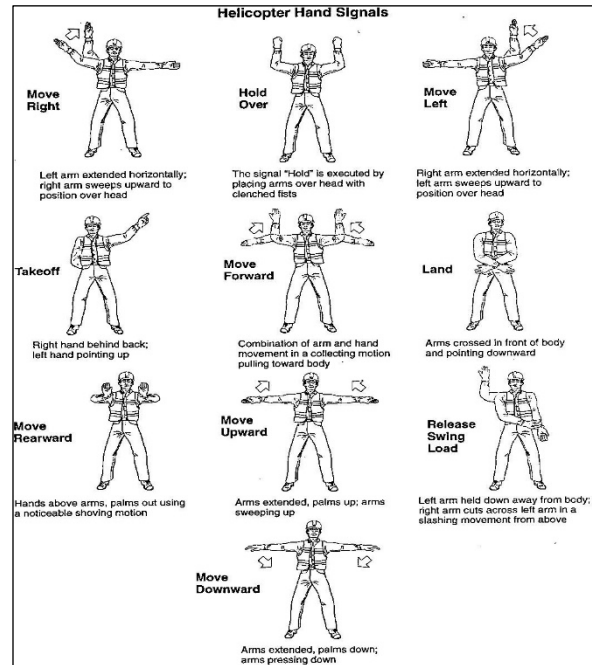
In some instances, none of the previous means of communication are appropriate because the line worker won't have the free use of their hands or radio communications. When this form of communication is needed, it should be covered during the tailboard and the signals reviewed so that they are clearly understood.

## Hand Signals

Helicopter hand signals are a universally approved method of communication when working with helicopters. They are accepted for the following applications:

- Communication between the pilot and the landing zone coordinator
- Communication between the helicopter line worker and the pilot
- Communication between the ground worker at the work site and the pilot

The following helicopter hand signals are approved for use and should be agreed to and understood by all personnel involved in the helicopter operations before work begins.



## Responsibilities and Duties

All personnel engaged in helicopter line work activities have special assignments and duties for which they are responsible. This section covers what those assignments and duties are for each work classification.

### Pilot-in-Command

The Pilot-in-Command is responsible for the following items:

1. Reviewing the Summit Helicopter Work Methods and Procedures Manual.
2. Knowing the approved forms of communications used by line workers for this type of work method and fully understand the head and hand signals.
3. Providing a detailed pre-job briefing of the flight operation to all workers.
4. Documenting HEC long line inspection daily.
5. Checking to verify release system is operational and working correctly;
6. Securing or removing loose equipment from the cabin.
7. Checking that the radio is operating correctly and on the correct frequency to communicate with the line crew and landing zone crew.

8. Checking that proper release is obtained to begin flight operations.
9. Completing a communications check between the aircraft and the line worker as applicable:
  - Head signals
  - Hand signals, and/or
  - Radio
11. Completing an equipment and aircraft safety check.
12. Stopping operations if any condition exists that is, in their opinion, unsafe or an unreasonable safety hazard.

### Aircraft Fueler/Ground Support

The helicopter crew member responsible for refueling the helicopter is responsible for the ensuring the following duties:

1. Fire extinguishers are available and in proper working condition.
2. The fuel truck is located in a safe location that will not interfere with the landing or takeoff of the helicopter.
3. The fuel nozzle and the aircraft are properly bonded during fueling.
4. That no smoking or open flames are present within 100 feet during the fueling operation.
5. That no smoking or open flames get any closer than 50 feet of the fuel truck at any time.
6. Watches to make sure no civilians approach or enter the landing zone.
7. Removes or installing doors as appropriate.
8. Installs rigging to helicopter as appropriate.
9. Provide support as requested by the pilot.
10. Act as guards to keep the landing zone clear of unauthorized personnel when required.

### Foreman

The person-in-charge of the line workers is responsible for the following:

1. Providing a detailed pre-job briefing of the work to be done by all workers.
2. Coordinating all work activities pertaining to the line work.
3. Maintaining communications with the line control center or inspector for the Utility as appropriate.
4. Reporting any accidents or emergencies as appropriate.
5. Stopping operations if any condition exists that is, in their opinion, unsafe or an unreasonable safety hazard.



Appendix B  
Aviation Communication Plan

# Aviation Communication Plan

Good communications must be maintained at all times between the helicopter pilot, helicopter line worker(s), landing zone coordinator, ground personnel, traffic control personnel, and other aircraft in the area. Additionally, when operating in or near controlled airspace, the helicopter pilot must be in contact with air traffic control and other aircraft operating in the area.

## Pre-flight Communication

On the prior day, helicopter flight information shall be provided via the Plan of the Day to CPUC/BLM monitors regarding the specific sites to be used for helicopter picks and the destination of the materials or assemblages being lifted out.

Daily flight notifications shall be issued by e-mail prior to commencement of any project flight activity. Information provided in the e-mail shall include pilot name, contact number, aircraft type, aircraft registration number, aircraft color, work/flight area, beginning time, estimated completion time, and scope of work. This information will be provided to CPUC/BLM monitors as well.

## Aircraft Communication Equipment

Aircraft shall be equipped with the following radio communication equipment:

- VHF AM Radio – 118.000 megahertz (MHz) to 138.975 MHz. Used for communication with other aircraft and air traffic control.
- VHF FM Radio – 138.000 MHz to 174.000 MHz. Used to communicate with ground personnel.
- UHF FM Radio – 403.000 MHz to 512.000 MHz. Used to communicate with ground personnel.
- Auxiliary FM Jack – The aircraft has an auxiliary FM radio jack that allows the connection of a portable, handheld radio to be connected to the aircraft audio panel. This allows the use of customer radios that operate on frequencies outside the standard VHF and UHF bands.
- Aircraft Intercom – The aircraft shall have a functioning intercom/interphone system to allow communication between the pilot, passengers, and line workers carried outside the helicopter, such as on the skid or platform.
- Cellular Phones – Cellular phones may be used for the following purposes:
  - Contacting Emergency Services.
  - Contacting FAA Flight Service or Company dispatch for flight following.
  - Communicating with line switching center.
- A GPS-based data system shall be installed in each aircraft:
  - The system shall identify for the pilot all project-approved construction work areas and those areas identified by Barnard/CH2M where overflights are restricted (such as seasonally restricted bird nesting areas and sensitive residential or institutional areas).

- Barnard/CH2M will provide Summit with an excel spreadsheet, containing the coordinates of active nest points, and the corresponding vertical and horizontal helicopter buffer distances (radius) in meters and feet, for ground and tower nests. The spreadsheet will be updated and resubmitted daily, with modifications from the Barnard/CH2M nesting bird management team.
- The GPS-based data system in each aircraft shall automatically record and preserve flight data sufficient to identify the aircraft’s flight path, including altitude aboveground. The system shall be capable of providing the information required with regard to flight path and aircraft identifier, and provide a location “ping” no less frequently the once every 3 seconds. These data shall be collected daily and submitted to Barnard/CH2M for a period of no less than 6 months and made available to CPUC or BLM upon request.
- Summit will provide the daily GPS flight path tracks to Barnard/CH2M in shapefile format, so that the flight paths can be made available to the CPUC and BLM upon request.

## Project Frequencies

### Barnard Construction – Air to Ground

Tag	RX	DPL	TX	DPL	Spacing
BC F-1	464.5000	612	469.5000	612	12.5
BC F-2	464.5000	612	464.5000	612	12.5
BC F-3	464.5500	612	464.5500	612	12.5
BC F-4	451.8000	612	456.8000	612	12.5
BC F-5	469.7125	612	469.7125	612	12.5
BC F-1	461.6125	612	461.6125	612	12.5

### Summit Helicopter – Air to Ground

Tag	RX	CTSS	TX	CTSS	Spacir
SHC F-1	151.700	100	151.700	100	12.5
SHC F-2	151.7600	103.5	151.7600	103.5	12.5
SHC F-3	151.5275	107.2	151.5275	107.2	12.5

### Project – Air to Air

Tag	TX/RX	
SCE	130.675	Project Air to Air – “Victor”
“02”	123.025	CTAF Air to Air

## Helicopter Communication

All aircraft on the project will monitor and make position reports on the project “Victor” frequency. Personnel involved with fueling or helicopter rigging operations will coordinate on one of Summit’s FM frequencies.

## Traffic Control Communication

All personnel involved in traffic control involving street closures, highway/freeway closures or waterway closures shall be in constant 2-way radio communication at all times. At least one person



(Primary Contact) from each entity providing security for the closure, such as law enforcement, outside traffic control vendor or customer traffic control personnel, shall also be on that same project frequency. The Primary Contact can then relay closure-specific information to their respective personnel on their own radio frequencies; who can then relay their status on the project frequency. This reduces the amount of chatter associated with the closure itself and the number of radios needed for large closures.

### Wire Pulling Communication

There shall be constant 2-way radio communication, on a project-specific frequency, between the pilot and puller operator during the pulling operation. Other personnel associated with the pulling operation should also be on the wire pull frequency. Communication during the pull shall be limited to the pilot and puller operator, although anyone can cease pulling at any time for safety reasons by using the phrase “Hold the Pull” at which time the pilot will stop pulling and say, “Chopper Held” and the puller operator will say “Puller Held.” All other radio traffic relating to non-pulling communication should be done on another frequency.

### HEC, Platform, or Skid Transfer Communication

Using a helicopter to transfer line workers between the ground and structures or structure-to-structure is safe and efficient. It is very important to have good communications between the pilot and line worker during these operations. This communication can be in the form of: radio communications, hand signals, and/or head signals. The form of communication that will be used for each task must be agreed to before starting flight operations and both the pilot and line worker must understand the signals that will be used.

The following communication points and information between the pilot and line worker are important to ensure that the operation is performed safely when making these transfers.

When removing the line worker on a structure, the pilot must know:

1. The location where the line worker will be picked up from and taken to next.
2. The location where the worker will be placed next, on either the ground or structure.
3. The location where the worker will be placed on the ground or structure.
4. Any obstacles at or surrounding the landing site.
5. The conditions of the transfer location such as: winds, slope, dust, etc.
6. When the worker is on the ground or on the structure and their safety is attached.
7. When it is safe for the helicopter to lift away from the ground or structure.

### HEC, Platform, or Skid Work Communication

The pilot must maneuver the helicopter to the work location and hold a position that allows the line worker on the platform or skid to attach the bond from the helicopter to the conductor. Once the bond is installed, the pilot will assume a position that allows the helicopter line worker to easily access the work area.

It is essential for this work that the pilot and line worker have constant communication with each other. The only way this can be accomplished is direct, radio communication either through FM radios or aircraft intercom/interphone. Head or hand signals alone do not provide the level of communication needed for these operations.

Communication for performing work off the helicopter includes the following crew coordination tasks:

1. Approach to the structure or conductor
2. Structure/conductor clearance
3. Bonding on to the structure/conductor
4. Coordination during the transfer/work task
5. Bond removal
6. Departure from the structure/conductor
7. Any other safety need for communication

Communication necessary for safe operations are outlined in the Summit Work Methods and Procedures Manual for each specific work task.

# Appendix C

## Aviation Risk Matrix



**Table C-1. Aviation Risk Matrix**

*Barnard Helicopter Use Plan*

All Aircraft Operations	Authority	The pilot in command is the absolute authority for the aircraft operation.
Effective Communication	Miscommunication Between Different Workgroups Receiving Incorrect Clearances to Work Line Incorrect Aircraft Movement Aviation Electronics Failure Leading to Loss of Radio Communication	<ul style="list-style-type: none"> <li>• Daily Job Plan Briefings each morning and anytime there is a change in job scope. Pilot, essential crew members, and ground personnel will attend and sign in on the Tailboard Form.</li> <li>• Be very detailed with all Tailboard discussions and write details on the tailboard document.</li> <li>• As required, personnel working adjacent to LZ/PZ and aircraft will maintain positive communications.</li> <li>• Radio frequencies will be kept clear of nonessential traffic.</li> <li>• Discuss hand and head signals in case of radio malfunction and Lost Communication.</li> <li>• Job Superintendent and Pilot in Command will be the originators of communication and disseminate information to others involved in the work evolution.</li> </ul>
Emergencies	Aircraft Accident	<ul style="list-style-type: none"> <li>• Designated person will call 911.</li> <li>• Personnel will comply with tailboard briefing on all emergency actions.</li> </ul>
Safety	Personnel Injury	<ul style="list-style-type: none"> <li>• Designated person will call 911 to have trained medical personnel respond to emergency.</li> <li>• Closest Hospital will be outlined on Safety Plan.</li> </ul>
General Aircraft Safety	General Aircraft Hazards	<ul style="list-style-type: none"> <li>• Noise protection should be worn within 100 feet of operating aircraft.</li> <li>• Chin straps shall be worn on hard hats and eye protection will be worn by any workers receiving external loads.</li> <li>• Personnel shall have visual contact with the pilot and have approval to approach prior to moving toward the aircraft.</li> <li>• Clothing shall consist of protective wear with no loose or dangling items.</li> </ul>

<b>Table C-1. Aviation Risk Matrix</b> <i>Barnard Helicopter Use Plan</i>		
<b>All Aircraft Operations</b>	<b>Authority</b>	<b>The pilot in command is the absolute authority for the aircraft operation.</b>
Personnel Safety	General Personnel Safety and LZ Safety	<ul style="list-style-type: none"> <li>• LZ/PZ shall be marked in accordance with Pilot’s requirements.</li> <li>• No unauthorized personnel shall be permitted within the confines without the approval of the pilot or Summit Helicopter ground personnel.</li> <li>• During aircraft operations, no personnel shall approach aircraft without visual contact and approval of the pilot.</li> <li>• Personnel shall only approach aircraft head-on toward the front and never toward the tail and tail rotor.</li> <li>• Personnel must be aware of ground slope and the decrease of allowable head space between the ground and overhead turning rotors.</li> </ul>
Personnel Safety	Deployment of Personnel	<ul style="list-style-type: none"> <li>• Unless addressed in the pre-job safety brief, passenger flights shall not be conducted. Only authorized personnel that have attended the pre-job aircraft safety brief shall be permitted to ride in aircraft. Personnel shall be moved only to and from pre-inspected, pilot approved LZ/PZs. Final authority for passenger operations shall lie with, and at the discretion of, the pilot in command.</li> </ul>
External Loads	Flight Hazard to Personnel or Property on the Ground (i.e., Road, Congested Area or Lines)	<ul style="list-style-type: none"> <li>• Aircraft shall be operated in accordance with Federal Aviation Regulations.</li> <li>• Aircraft shall be operated at not less than the altitudes specified in the Federal Aviation Regulations (FARs) to include the maintaining of adequate clearance from trees along the flight path both vertically and horizontally.</li> </ul>

**Table C-1. Aviation Risk Matrix**  
*Barnard Helicopter Use Plan*

All Aircraft Operations	Authority	The pilot in command is the absolute authority for the aircraft operation.
Equipment Inspection	Falls Equipment Damage Physical Rigging Failure	<ul style="list-style-type: none"> <li>• All Personal Protective Equipment (PPE) (Fall Protection and all PPE) will be inspected daily for defects and damage.</li> <li>• Any PPE or Fall Protection that does not pass inspection by a Competent Person will be tagged “Out of Service” and other materials must be obtained.</li> <li>• All rigging shall be inspected daily for serviceability and suitability prior to operations by the appropriate and qualified personnel.</li> <li>• Rigging shall be laid out and connections checked prior to external load operations.</li> <li>• External load release mechanisms shall be tested prior to operations.</li> <li>• In the event of a failure, all operations shall cease until foreman and helicopter operation specialist have inspected and repaired, to serviceable conditions, all affected components.</li> </ul>
External Load Operations	Passenger Prohibition	<ul style="list-style-type: none"> <li>• No non-essential personnel shall be on board aircraft during the conducting of external load operations.</li> </ul>
External Load Operations	Rigging Failure	<ul style="list-style-type: none"> <li>• All rigging shall be inspected daily for serviceability and suitability prior to operations by the appropriate and qualified personnel.</li> <li>• Rigging shall be laid out and connections checked prior to external load operations.</li> <li>• External load release mechanisms shall be tested operations prior to operations.</li> <li>• In the event of a failure, all operations shall cease until foreman and pilot have inspected and repaired, to serviceable conditions, all affected components.</li> </ul>
External Load Operations	Overhead Hazard	<ul style="list-style-type: none"> <li>• No personnel will be allowed to stand under any load carried by the helicopter. All personnel designated as part of the working crew will keep the flying load in view at all times.</li> </ul>



<b>Table C-1. Aviation Risk Matrix</b> <i>Barnard Helicopter Use Plan</i>		
<b>All Aircraft Operations</b>	<b>Authority</b>	<b>The pilot in command is the absolute authority for the aircraft operation.</b>
External Load Operations	Communications Failure	<ul style="list-style-type: none"> <li>• Radio checks will be completed immediately prior to operations with all assigned personnel checking in.</li> <li>• Head and/or hand signals can be substitutes for radio communication in some cases.</li> <li>• Radio communication shall be required for wire pulling operations.</li> <li>• Lifting operations may be suspended until communications are re-established. Loads would then be returned to the fly yard and set back on the ground. Aircraft shall hold on the ground until communications are restored.</li> </ul>
Environmental	Fuel Release/Oil Release/Impacts to Sensitive Resources/Noise Impacts	<ul style="list-style-type: none"> <li>• Helicopter use shall be avoided or managed to the extent feasible from February 1 to August 31.</li> <li>• All vehicles shall be properly placarded and labeled.</li> <li>• Spill kits and dam containment material required in all fueling vehicles.</li> <li>• Utilize proper fueling procedures to prevent spills.</li> <li>• Communicate with project biologists in the event of any environmental concerns and or spills.</li> </ul>
Flight Rules	Flight Hazard to Personnel or Property on the Ground (i.e., Road, Congested Area or Lines)	<ul style="list-style-type: none"> <li>• Aircraft shall be operated in accordance with Federal Aviation Regulations, and crews shall employ the use of guard structures and/or flaggers as appropriate.</li> <li>• Aircraft shall be operated at not less than the altitudes as specified in the FARs to include the maintaining of adequate clearance from trees along the flight path, both vertically and horizontally.</li> <li>• External load operations (i.e., sling loads) shall be conducted in accordance with FAR Part 133. Sparsely populated area operations may be conducted after the area has been cleared and the load is flown in a manner posing no risk to person or property on the ground. Congested Area Plans may not be required for these operations due to the remote locations.</li> <li>• External loads will be secured by appropriate rigging.</li> <li>• Only qualified riggers shall prepare and attach external loads to helicopters. Rigging shall be appropriate to the nature of the load, including the use of devices necessary to prevent materials being lost in flight.</li> </ul>

<b>Table C-1. Aviation Risk Matrix</b> <i>Barnard Helicopter Use Plan</i>		
<b>All Aircraft Operations</b>	<b>Authority</b>	<b>The pilot in command is the absolute authority for the aircraft operation.</b>
		<ul style="list-style-type: none"> <li>When necessary to reduce load in-flight spinning and movement, drag chutes will be attached to loads. The need for drag chutes will be determined by the pilot and rigging personnel.</li> </ul>
Deployment of Personnel	Flight Hazard to Personnel	<ul style="list-style-type: none"> <li>Unless addressed in the pre-job safety brief, passenger flights shall not be conducted. Only authorized personnel that have attended the pre-job aircraft safety brief shall be permitted to ride in the aircraft. Personnel shall be moved only to and from pre-inspected, pilot approved LZ/PZs. Final authority for passenger operations shall lie with, and at the discretion of, the pilot in command.</li> </ul>
Staging Area Security and Movement around Helicopter	Main Rotor, Tail Rotor, and Engine Exhaust Hazards  Improper Entering and Departing of the Aircraft  Loose Articles Around Helicopter, Unauthorized People/Equipment Around Helicopter	<ul style="list-style-type: none"> <li>Follow LZ Safety Rules in Summit Helicopter’s Work Methods Manual.</li> <li>Maintain the LZ by watering enough to mitigate dust issues.</li> <li>Control vehicle access to the LZ, especially when aircraft blades are turning.</li> <li>Control access to the LZ, only personnel briefed on the Daily Tailboard should be in the LZ.</li> <li>Beware of rotor wash; keep LZ free of debris, loose articles; keep vehicle windows up and trailer doors secured, etc.</li> <li>All equipment, material, etc. should be carried at waist level in the LZ to keep out of contact with rotor blades.</li> </ul>
Potential Difference	Difference in Potential Between Aircraft and Structure  Potential Difference Between Supposedly De-energized Lines and Aerial Lineman on the Structures	<ul style="list-style-type: none"> <li>Lineman will utilize wands and/or bonding clamps to equalize potential prior to transfer operations.</li> <li>Do not proceed with any work without testing and grounding.</li> <li>Testing of the line requires independent verification of testing results, per procedure.</li> </ul>

**Table C-1. Aviation Risk Matrix**

*Barnard Helicopter Use Plan*

<b>All Aircraft Operations</b>	<b>Authority</b>	<b>The pilot in command is the absolute authority for the aircraft operation.</b>
Aircraft Rotor Contact with Wires	Aircraft Rotor Experiences Blade Strikes with Main or Tail Rotor Blades During Revolutions	<ul style="list-style-type: none"> <li>• Helicopter will avoid rotors coming in the vicinity of wires during long lining.</li> <li>• Daily Job Plans prior to each day’s work evolution reviews rotor blade clearance limits.</li> <li>• Aircraft will always traverse line crossings at the lines structures, as they are the highest point.</li> <li>• Stop Work policy in place for all Pilots and Crewmembers.</li> <li>• Pilot and Crewmembers in communication at all time.</li> <li>• Pilots are highly experienced and well versed in powerline projects.</li> </ul>

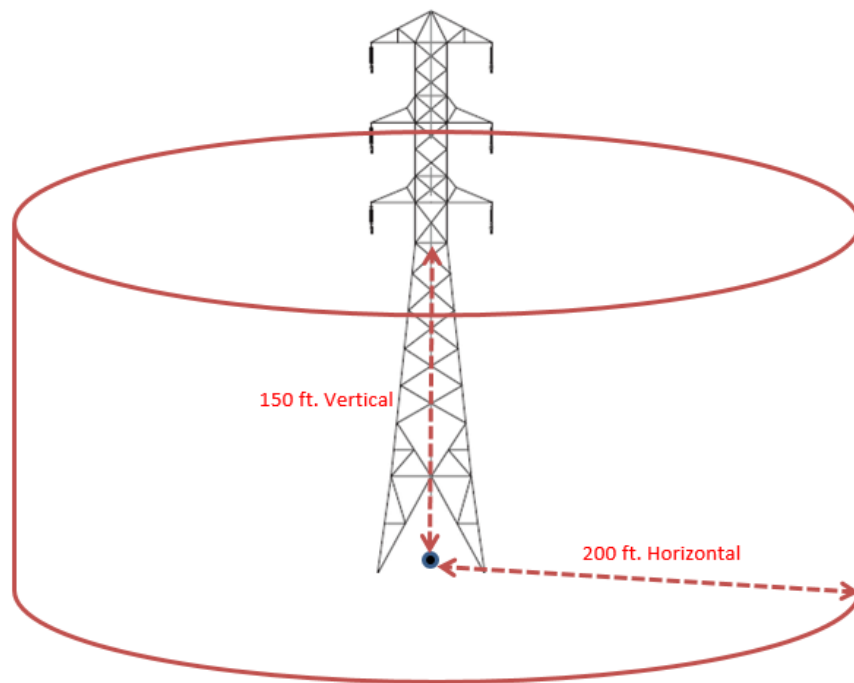


# Appendix D

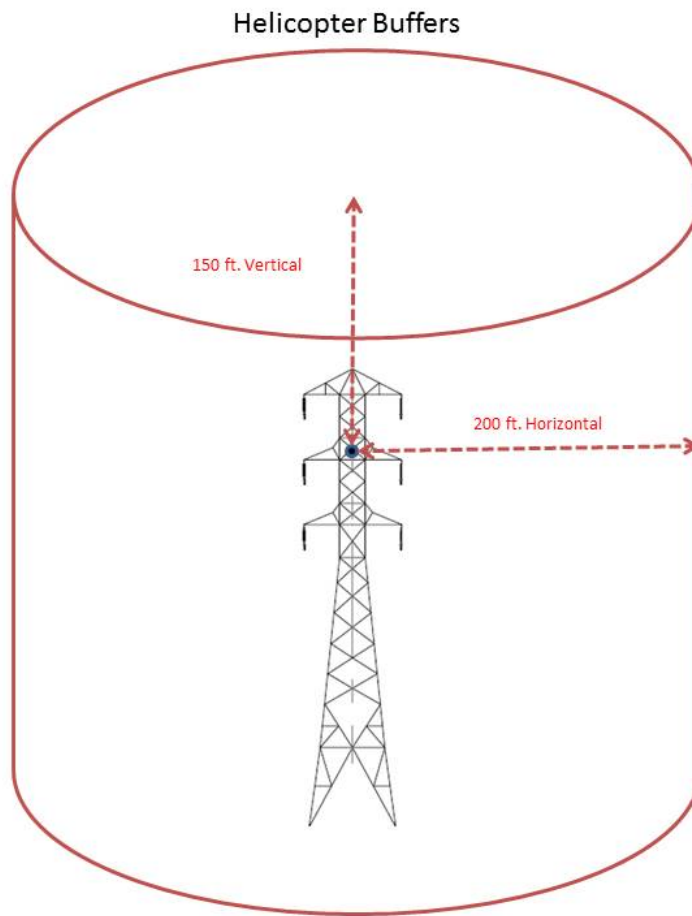
## Helicopter Buffer Examples

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## Helicopter Buffers



**Figure 1. Example of Helicopter Buffer When Nest Is on the Ground**



**Figure 2. Example of Helicopter Buffers When a Nest Is Located Within the Tower**

## **ATTACHMENT C**

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Pre-Construction Mitigation Measures, APMs, and BO CMs



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Agriculture</b>			
<p><b>AG-3a:</b> Agricultural lands coordination</p>	<p><b>Establish agreement and coordinate construction activities with agricultural landowners.</b> Sixty (60) days prior to the start of project construction, Southern California Edison (SCE) shall coordinate with property owners of Important Farmland (Prime Farmland, Farmland of Statewide Importance, Unique Farmland) that currently is being used for agricultural purposes and that will be used for construction and operation of the project, access and spur roads, staging areas, and other project-related activities. Should SCE require an additional agreement in addition to any new or existing agreement in force, the additional agreement would be for temporary purposes outside of the existing SCE ROW where SCE does not have an existing or newly acquired or modified easement right to perform construction activities.</p> <p>The purpose of this agreement will be to set forth the use of agriculturally utilized Prime Farmland, Farmland of Statewide Importance, Unique Farmland during construction in order to: (1) schedule proposed construction activities at a location and time when damage to agricultural operations would be minimized, and (2) ensure that any areas damaged or disturbed by construction are restored to a condition mutually agreed upon by the landowner and SCE and in accordance with the existing easement language.</p> <p>SCE shall coordinate with the agricultural landowners in the affected areas where Important Farmland will be temporarily disturbed in order to determine when and where construction should occur in order to minimize damage to agricultural operations. This includes avoiding construction during peak planting, growing, and harvest seasons as feasible. If damage or destruction does occur, SCE shall perform restoration activities on the disturbed area in order to return the area to a pre-determined condition or the pre-construction condition, whichever option is agreed upon by the landowner and SCE and in accordance with the existing easement language. This could include activities such as soil preparation, regrading, and reseeded. Restoration activities performed by SCE will vary, depending on the language in existing or newly acquired or revised easement documents. This measure applies to landowners with agriculturally utilized land that is impacted by the Proposed Project. SCE shall provide proof of the continued use of Important Farmland currently used for agriculture through the submittal of a signed temporary construction easement or grant of easement agreement between an individual property owner and SCE. The signed agreements shall be submitted to the CPUC for review and approval prior to the start of construction.</p>	<p>Coordinate with agricultural land owners 60 days prior to construction.</p> <p>Agreements with property owners to be provided to CPUC for review and approval.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Air Quality</b>			
<p><b>AQ-1a:</b> Fugitive dust control</p> <p><i>MM AQ-1a supersedes APM AIR-2</i></p>	<p><b>Control fugitive dust.</b> SCE shall develop a Fugitive Dust Control Plan and at least 60 days prior to construction submit the plan to the CPUC/BLM and SCAQMD for review and approval. The approved plan shall be implemented for all construction activities that may be a source of fugitive dust. Any fugitive dust control requirements in the SCAQMD rules and regulations, specifically Rule 403 and Rule 403.1, that are in addition to or more stringent than the requirements listed below shall be implemented and included in the plan. The plan shall include the following feasible measures:</p> <ul style="list-style-type: none"> <li>▪ Traffic speeds on unpaved roads shall not exceed 15 miles per hour.</li> <li>▪ A traffic route plan shall be developed and vehicles shall follow routes that minimize unpaved road travel.</li> <li>▪ Unpaved roads, substation areas, and staging areas shall be watered three times daily when being used by construction vehicle traffic, or non-toxic soil stabilizers (e.g., water, tackifiers, and soil binders) shall be applied per manufacturer’s recommendations and in sufficient quantities to maintain compliance with SCAQMD and jurisdictional requirements to maintain no visible vehicle travel dust emissions.</li> <li>▪ Inactive excavated or graded soils and soil piles shall be sufficiently watered or sprayed with a soil stabilizer to create a surface crust or shall be covered.</li> <li>▪ Drop heights from excavators and loaders shall be minimized to a distance no more than 5 feet.</li> <li>▪ Soil truck loads shall be covered and gate seals on dump trucks shall be tight.</li> <li>▪ Construction activities that occur on unpaved surfaces shall be discontinued during periods when activities are causing visible dust plumes that cannot be avoided by approved dust suppression methods. All grading and excavation activities shall be suspended when wind speeds exceed 30 miles per hour unless otherwise approved in the Fugitive Dust Control Plan. Wind speed measurement methods shall be consistent with the SCAQMD Implementation Handbook for Rule 403 and Rule 403.1.</li> </ul>	<p>Submit Fugitive Dust Control Plan 60 days prior to construction</p>	
<p><b>APM AIR-1:</b> Exhaust Emissions Control Plan</p>	<p><b>Exhaust Emissions Control Plan.</b> SCE would prepare an Exhaust Emissions Control Plan to establish a target goal of a project-wide fleet average reduction of 20 percent NO<sub>x</sub> compared to the estimated unmitigated emissions as presented in the PEA for applicable diesel-fueled off-road construction equipment of more than 50 horsepower. Acceptable options for reducing emissions could include, but are not limited to: the use of newer model engines meeting U.S. EPA Tier 3 standards if available (or better), low emissions diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other similar available options.</p>	<p>Submit Exhaust Emissions Control Plan 60 days prior to construction</p>	
<p><b>AQ-1b:</b> Off-road emissions</p> <p><i>MM AQ-1b supplements APM AIR-1</i></p>	<p><b>Control off-road equipment emissions.</b> Off-road equipment with engines larger than 50 horsepower shall have engines that meet or exceed U.S. EPA/CARB Tier 3 Emissions Standards. Exceptions will be allowed only on a case by case basis for two specific situations: (1) an off-road equipment item that is a specialty, or unique, piece of equipment that cannot be found with a Tier 3 or better engine after a due diligence search; and/or (2) an off-road equipment item that will be used for a total of no more than 10 days.</p>	<p>Off-road equipment to meet standards.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Biological Resources – Vegetation (NOTE: The BIO Vegetation APMs have been superseded by the following mitigation measures.)</b>			
<b>VEG-1a:</b> Biological monitoring and reporting	<p><b>Conduct biological monitoring and reporting.</b> [Partial MM text]...</p> <p><b>Lead biologist:</b> SCE shall nominate a lead biologist and submit the nominee’s resume to the CPUC and BLM for concurrence, no less than 60 days prior to the start of any ground-disturbing activities, including those occurring prior to site mobilization (including, but not limited to geotechnical borings or hazardous waste evaluations). At minimum the lead biologist will hold a bachelor’s degree in biological sciences, zoology, botany, ecology, or a closely related field; have at least three years of experience in field biology and at least one year of direct field experience with biological resources found in or near the project area, <i>OR</i> relevant education and experience that demonstrates the ability to carry out the tasks required of a lead biologist. The resume shall demonstrate to the satisfaction of the CPUC and BLM the appropriate education and experience to accomplish the assigned biological resources tasks. ...</p>	Lead biologist resume to be provided 60+ days before ground disturbance.	
<b>VEG-1b:</b> Worker Environmental Awareness Program	<p><b>Prepare and implement a Worker Environmental Awareness Program (WEAP).</b> [Partial MM text] SCE shall prepare and implement a project-specific Worker Environmental Awareness Program (WEAP) to educate on-site workers about the Proposed Project’s sensitive environmental issues. ...</p> <p>The WEAP shall consist of a training presentation, with supporting written materials provided to all participants. At least 60 days prior to the start of ground-disturbing activities, SCE shall submit the WEAP presentation and associated materials to the CPUC and BLM for review and approval in consultation with the USFWS and CDFW. The WEAP training shall include, at minimum:</p> <ul style="list-style-type: none"> <li>▪ Overview of the project, the jurisdictions the project route passes through (e.g., BLM, reservation, WR-MSHCP, CV-MSHCP) and any special requirements of those jurisdictions.</li> <li>▪ Overview of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and the consequences of non-compliance with these acts.</li> <li>▪ Overview of the project mitigation and biological permit requirements, and the consequences of non-compliance with these requirements.</li> <li>▪ Sensitive biological resources on the project site and adjacent areas, including nesting birds, special-status plants and wildlife and sensitive habitats known or likely to occur on the project site, project requirements for protecting these resources, and the consequences of non-compliance.</li> <li>▪ Construction restrictions such as limited operating periods, ESAs, and buffers.</li> <li>▪ Avoidance of invasive weed introductions onto the project site and surrounding areas, and description of the project’s weed control plan and associated compliance requirements for workers on the site.</li> <li>▪ Function, responsibilities, and authority of biological and environmental monitors and how they interact with construction crews.</li> <li>▪ Requirement to remain within authorized work areas and on approved roads, with examples of the flagging and signage used to designate these areas and roads, and the consequences of non-compliance.</li> <li>▪ Procedure for obtaining clearance from a biological monitor to enter a work site and begin work (including moving equipment), and the requirement to wait for that clearance.</li> <li>▪ One-hour hold (or other method SCE will use to halt work when necessary to maintain compliance) and the requirement for compliance.</li> <li>▪ ESAs and associated restrictions, and other restrictions such as no grading areas, flagging or signage designations, and consequences of non-compliance.</li> </ul>	SCE to prepare and submit WEAP for approval 60+ days before ground-disturbing activities.  Minimum WEAP training specified in MM.	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<ul style="list-style-type: none"> <li>▪ Nest buffers and associated restrictions and the consequences of non-compliance. Procedure and time frame for halting work and removing equipment when a new buffer is established. Discussion of nest deterrents.</li> <li>▪ Explanation that wildlife must not be harmed or harassed. Procedures for covering pipes, securing excavations, and installing ramps to prevent wildlife entrapment. What to do and who to contact if dead, injured, or entrapped animals are encountered (see Mitigation Measure WIL-5b).</li> <li>▪ General safety protocols such as hazardous substance spill prevention, containment, and cleanup measures; fire prevention and protection measures; designated smoking areas (if any) and cigarette disposal; safety hazards that may be caused by plants and animals; and procedure for dealing with rattlesnakes in or near work areas or access roads (see Mitigation Measure WIL-5b).</li> <li>▪ Project requirements that have resulted in repeated compliance issues on other recent transmission line projects, such as dust control, speed limits, track out (dirt or mud tracked from access roads or work sites onto paved public roads or other areas), personal protective equipment (PPE), work hours, working prior to clearance, and waste containment and disposal.</li> <li>▪ Printed training materials, including photographs and brief descriptions of all special-status plants and animals that may be encountered on the project, including behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures.</li> <li>▪ Contact information for SCE, construction management, and contractor environmental personnel, and who to contact with questions.</li> <li>▪ Training acknowledgment form to be signed by each worker indicating that they understand and will abide by the guidelines, and a hardhat sticker so WEAP attendance may be easily verified in the field.</li> </ul> <p><b>WEAP Lite.</b> An abbreviated version of WEAP training (“WEAP lite”) may be used for individuals who are exclusively delivery drivers, concrete truck drivers, or visitors to the project site, and will be provided by a qualified project biologist, biological monitor, or environmental field staff prior to those individuals entering or working on the project.</p> <p>Short-term visitors (total of 5 days or less per year) to the project site who will be riding with and in the company of WEAP-trained project personnel for the entire duration of their visit(s) are not required to attend WEAP or WEAP lite training.</p> <p>WEAP lite training will provide sufficient information for the individual to understand and maintain compliance with project mitigation measures and permit conditions. WEAP lite presentations will be tailored to the situation and emphasize project requirements that are relevant to that situation (e.g., dust control, speed limits, staying within project roads and work areas, and use of washouts for concrete truck drivers).</p> <p>A training acknowledgment form will be signed by each participant indicating that they understand and will abide by the guidelines, and a hardhat sticker so WEAP lite attendance may be easily verified in the field. SCE will maintain a list of personnel who have completed WEAP lite training. This list will be provided to the CPUC and BLM upon request.</p> <p><b>WEAP Refreshers.</b> Biological monitors or environmental field staff will periodically present brief WEAP refresher presentations at tailboards to help construction crews and other personnel maintain awareness of environmental sensitivities and requirements. A 5- to 10-minute informal talk will be presented at each of the project’s main contractor/subcontractor tailboards at least once a week.</p> <p>When a contractor or subcontractor resumes work after a long break (more than six (6) consecutive calendar days with no substantial work on project construction in the field), a biological monitor or environmental field staff will provide an extended WEAP refresher presentation (10-20 minutes) at each of the contractor/subcontractor tailboards on the first day back to work.</p>		



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	<p>The monitor will note the date, contractor or subcontractor, tailboard location and time, and topic(s) discussed during the WEAP refresher and include this information in their daily monitoring report.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE's PSE [Participating Special Entity] status); CV-MSHCP (within the CV-MSHCP regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>		
<p><b>VEG-1c:</b> Minimize native vegetation and habitat loss.</p>	<p><b>Minimize native vegetation and habitat loss.</b> [Partial MM text] Final engineering of the project shall minimize the extent of disturbance and removal of native vegetation and habitat, to the extent safe and feasible. Wherever feasible, work activities and roadways will avoid or minimize direct or indirect effects to sensitive habitat types or jurisdictional waters and provide buffer areas to minimize disturbance. Wherever feasible, project access will utilize existing routes or bridges over jurisdictional waters.</p> <p>Prior to beginning any ground-disturbing activities, SCE shall provide CPUC and BLM with final engineering GIS shapefiles depicting all temporary and permanent disturbance areas, as well as summary data on temporary and permanent disturbance for each vegetation or habitat type within each jurisdictional area (San Bernardino County, WR-MSHCP, CV-MSHCP, reservation, and BLM). All project disturbance areas within mapped grassland/forbland will be further categorized as either suitable or not suitable as Stephens' kangaroo rat habitat, and the relative cover of native perennial grasses shall be quantified (see VEG-1d, Part B).</p> <p>Prior to any construction, equipment or crew mobilization at each work site, work areas will be marked with staking or flagging to identify the limits of work and will be verified by project environmental staff and CPUC Environmental Monitor. Staking and flagging will clearly indicate the work area boundaries. Where staking cannot be used, traffic cones, traffic delineators, or other markers will be used. Staking and flagging or other markers will be in place during construction activities at each work site and will be refreshed as needed. Coded flagging colors or color combinations will be consistent and uniform across the project. All work activities, vehicles, and equipment will be confined to approved roads and staked and flagged or marked work areas.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE's PSE status); CV-MSHCP (within the CV-MSHCP regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>Prior to any ground-disturbing activities, SCE shall provide CPUC/BLM final engineering GIS shapefiles depicting all temporary and permanent disturbance areas, as well as summary data on temporary and permanent disturbance for each vegetation or habitat type within each jurisdictional area.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VEG-1d:</b> Restoration of temporary disturbance areas</p>	<p><b>Restore or revegetate temporary disturbance areas.</b> [Partial MM text] This measure has two parts: Part A and Part B. Part A is applicable to all temporary disturbance areas, and Part B is applicable to disturbance occurring in sensitive vegetation types and special-status species habitats.</p> <p>For all revegetation or restoration areas, if a fire, flood, or other disturbance beyond the control of SCE, CPUC, and BLM damages a revegetation area within the monitoring period, SCE shall be responsible for a one-time replacement. If a second event occurs, no replanting is required, unless the event is caused by SCE's activity (based upon maintenance of erosion control measures; fencing, gates, or other site control; or investigation by a firefighting agency).</p>	<p>Prior to ground-disturbing activities, SCE shall prepare and submit for CPUC/BLM approval a (draft) Habitat Restoration and Revegetation Plan (HRRP). The HRRP to be finalized within 12 months of starting construction.</p> <p>See also MM VEG-4a: Minimize and mitigate impacts to special-status plants</p> <p>Contents of HRRP and success criteria are specified in MM.</p> <p>Annual reporting required for restoration and revegetation efforts. Monitoring of the reclamation, revegetation, or restoration sites will continue annually for no fewer than five (5) years or until the defined success criteria are achieved.</p>	
	<p><b>Part A: Habitat restoration and revegetation for all temporary disturbance areas.</b></p> <p>SCE shall prepare and implement a Habitat Restoration and Revegetation Plan (HRRP), to restore or revegetate all temporary disturbance areas, including temporary disturbance areas around tower construction sites, laydown or staging areas, temporary access and spur roads, cut and fill slopes, and locations of existing towers that are removed during construction of the project. For temporary disturbances in agriculture, developed/disturbed, and most grassland/forbland (excluding suitable Stephens' kangaroo rat habitat and any areas with 10 percent or greater relative cover of native perennial grass species), and for temporary disturbance areas that cannot be effectively revegetated and are therefore subject to off-site compensation (Mitigation Measure VEG-1e), the overall goals of the HRRP will be to minimize weed invasion, dust generation, and soil erosion. The goals for sensitive vegetation and special-status species habitat are described in Part B of this Mitigation Measure.</p> <p>The Draft HRRP shall be submitted to CPUC and BLM review and approval prior to the beginning of ground-disturbing activities. SCE shall incorporate all requested revisions in coordination with the CPUC and BLM and finalize the HRRP within 12 months from the start of construction.</p> <p>For all temporary disturbance areas, the HRRP shall include the following elements:</p> <ul style="list-style-type: none"> <li>▪ A statement of revegetation goals and objectives for each portion of the project area, based on vegetation type and jurisdictional status of each site.</li> <li>▪ Quantitative success criteria for each revegetation or restoration site or category.</li> <li>▪ Implementation details, including but not limited to topsoil stockpiling and handling; post-construction site preparation; soil decompaction and recontouring; planting and seeding palettes to include only native, locally sourced materials with confirmed availability from suppliers; fall-season planting or seeding dates.</li> <li>▪ Maintenance, including but not limited to irrigation or hand-watering schedule and equipment, erosion control, and weed control.</li> </ul>		

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

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	<ul style="list-style-type: none"> <li>▪ Monitoring and Reporting, specifying monitoring schedule and data collection methods throughout establishment of vegetation with key indicators of successful or unsuccessful progress, and quantitative values to objectively determine success or failure at the conclusion of the monitoring period.</li> <li>▪ Contingency measures such as re-planting, drainage repairs, adjustments to irrigation or weeding schedule, and extension of maintenance beyond the original schedule, to repair or remediate sites not on track to meet success criteria, or not meeting the criteria at the close of the originally scheduled monitoring period.</li> </ul> <p>The Integrated Weed Management Plan (Mitigation Measure VEG-2a) will be implemented throughout implementation of the HRRP. For all revegetation or restoration areas, only seed or potted nursery stock of locally occurring native species from a local source will be used for revegetation. Seeding and planting will be conducted as described in Chapter 5 of <i>Rehabilitation of Disturbed Lands in California</i> (Newton and Claassen, 2003). The list of plants observed during botanical surveys of the project area will be used as a guide to site-specific plant selection.</p> <p>For all revegetation or restoration areas, the HRRP will include objective, quantifiable success criteria, commensurate with the goals for each site. Monitoring of the reclamation, revegetation, or restoration sites will continue annually for no fewer than five (5) years or until the defined success criteria are achieved, whichever is later. SCE will be responsible for implementing remediation measures as needed. Following remediation work, each site will still be subject to the success criteria required for the initial reclamation, revegetation, or restoration. The monitoring period for remediation work will be concurrent with the monitoring period required for the initial reclamation, revegetation, or restoration.</p> <p><b>Part B: Additional habitat restoration and revegetation requirements for sensitive vegetation and special-status species habitat.</b></p> <p>For temporary disturbances in grassland/forbland that is either suitable Stephens' kangaroo rat habitat, or has 10 percent or greater relative cover of native perennial grass species (see VEG-1c), and in all other vegetation types (alluvial scrub, coast live oak woodland, coastal sage scrub, chaparral, desert scrub, riparian woodland, and aeolian sand), the Habitat Restoration and Revegetation Plan will be designed to replace the habitat values present prior to disturbance (i.e., native plant species cover, habitat structure, and soil or substrate conditions). Stephens' kangaroo rat habitat suitability is to be determined by a qualified SKR biologist. The following performance standards must be met by the end of the monitoring period:</p> <ul style="list-style-type: none"> <li>▪ At least 80 percent of the vegetation cover within the restoration area shall be native species that naturally occur in local native habitats; in grassland or forbland habitat this criterion will be adjusted to account for pre-disturbance non-native grass cover;</li> <li>▪ Absolute cover of native plant species and density of native shrubs and trees within the restoration areas shall equal at least 60 percent of the pre-disturbance or reference vegetation cover and density; and</li> <li>▪ The site shall have persisted successfully without irrigation or remedial planting for a minimum of two years prior to completion of monitoring.</li> </ul> <p>For revegetation or restoration in these habitats, the HRRP will include (in addition to the components listed in Part A):</p> <ul style="list-style-type: none"> <li>▪ A map depicting the locations of all temporary disturbance areas in these habitats, including a quantitative evaluation of native grass cover and Stephens' kangaroo rat habitat suitability in all mapped grassland/forbland areas, subject to requirements of Part B;</li> <li>▪ An inventory of any temporary disturbance areas that cannot be effectively revegetated or restored to replace habitat values within a five-year timeframe (these will be categorized as "long-term disturbance areas," to be addressed under habitat compensation, Mitigation Measure VEG-1e).</li> </ul>		

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	<p><b>Reporting (for Part A and Part B).</b> For all revegetation or restoration areas, SCE will provide annual reports to the CPUC and BLM verifying the total vegetation acreage subject to temporary and permanent disturbance, identifying which items of the HRRP have been completed, and which items are still outstanding. The annual reports will also include a summary of the reclamation, revegetation, or restoration activities for the year, a discussion of whether performance standards for the year were met, any remedial actions conducted and recommendations for remedial action, if warranted, that are planned for the upcoming year. Each annual report will be submitted within 90 days after completion of each year of revegetation and restoration work.</p> <p><b>Implementation locations:</b> Parts A and B of this mitigation measure shall apply as follows: San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE’s PSE status); CV-MSHCP (within the CV-MSHCP regardless of SCE’s PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>		
<p><b>VEG-2a:</b> Weed Management</p>	<p><b>VEG-2a: Prepare and implement an Integrated Weed Management Plan.</b> SCE shall prepare and implement an Integrated Weed Management Plan (IWMP) describing the proposed methods of preventing or controlling project-related spread of weeds or new weed infestations. The IWMP also must meet BLM’s requirements for NEPA disclosure and analysis if herbicide use is proposed for the project. A Draft IWMP shall be submitted to the CPUC and BLM for review and approval at least 60 days prior to SCE’s application for Notice to Proceed, and no pre-construction activities (e.g., for geotechnical borings, hazardous waste evaluations, etc.), construction, equipment or crew mobilization, or project-related ground-disturbing activity shall proceed until the IWMP is approved.</p> <p>For the purpose of the IWMP, “weeds” shall include designated noxious weeds, as well as any other non-native weeds or pest plants identified on the weed lists of the California Department of Food and Agriculture, the California Invasive Plant Council, or identified by BLM as special concern. The IWMP will include the contents listed below. The IWMP will be implemented throughout project pre-construction, construction, and post-construction restoration phases. The IWMP will include the information defined in the following paragraphs.</p> <p><b>Background.</b> An assessment of the Proposed Project’s potential to cause spread of invasive non-native weeds into new areas, or to introduce new non-native invasive weeds into the ROW. This section must list known and potential non-native and invasive weeds occurring on the ROW and in the project region, and identify threat rankings and potential consequences of project-related occurrence or spread for each species. This assessment will include, but is not limited to, weeds that (1) are rated high or moderate for negative ecological impact in the California Invasive Plant Inventory Database (Cal-IPC, 2006), and (2) aid and promote the spread of wildfires (such as cheatgrass, Saharan mustard, and medusa head). This section will identify control goals for each species (e.g., eradication, suppression, or containment) likely to be found within the Proposed Project area.</p> <p><b>Pre-construction weed inventory.</b> SCE shall inventory all areas (both within and outside the ROW) subject to project-related vegetation removal/disturbance, “drive and crush,” and ground-disturbing activity, including, but not limited to, tower pad preparation and construction areas, tower removal sites, pulling and tensioning sites, assembly yards, and any potential new or improved access and spur roads. The weed inventory shall also include vehicle and equipment access routes within the ROW and all project staging and storage yards. Weed occurrences shall be mapped and described according to density and area covered. The map will be updated at least once a year.</p> <p><b>Pre-construction weed treatment.</b> Weed infestations identified in the pre-construction weed inventory shall be evaluated to identify potential for project-related spread. The IWMP will identify any infestations to be controlled or eradicated prior to project construction, or other site-specific weed management requirements (e.g., avoidance of soil or transport and site-specific vehicle washing where threat or spread potential is high). Control and follow-up monitoring of pre-construction weed treatment sites will follow methods identified in appropriate sections of the IWMP.</p> <p><b>Prevention.</b> The IWMP will specify methods to minimize potential transport of weed seeds onto the ROW, or from one section of the ROW to another. The ROW may be divided into “weed zones,” based on known or likely</p>	<p>SCE to prepare and submit Integrated Weed Management Plan (IWMP) 60+ days prior to any Notice to Proceed application. No ground-disturbing activity to occur until IWMP is approved.</p> <p>MM describes contents of IWMP.</p>	



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

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	<p>invasive weeds in any portion of the ROW. The IWMP will specify inspection procedures for construction materials and equipment entering the Proposed Project area. Vehicles and equipment may be inspected and cleaned at entry points to specified portions of the ROW, and before leaving work sites where weed occurrences must be contained locally. Construction equipment shall be cleaned of dirt and mud that could contain weed seeds, roots, or rhizomes. Equipment shall be inspected to ensure it is free of any dirt or mud that could contain weed seeds, and the tracks, outriggers, tires, and undercarriage will be carefully washed, with special attention being paid to axles, frame, cross members, motor mounts, underneath steps, running boards, and front bumper/brush guard assemblies. Other construction vehicles (e.g., pick-up trucks) that will be frequently entering and exiting the site will be inspected and washed on an as-needed basis. Tools such as chainsaws, hand clippers, pruners, etc., shall be cleaned of dirt and mud before entering project work areas.</p> <p>All vehicles will be washed off-site when possible. If off-site washing is infeasible, on-site cleaning stations will be set up at specified locations to clean equipment before it enters the work area. Wash stations will be located away from native habitat or special-status species occurrences. Wastewater from cleaning stations will not be allowed to run off the cleaning station site. When vehicles and equipment are washed, a daily log must be kept stating the location, date and time, types of equipment, methods used, and personnel present. The log shall contain the signature of the responsible crewmember. Written or electronic logs shall be available to BLM and CPUC monitors on request.</p> <p>Erosion control materials (e.g., hay bales) must be certified free of weed seed before they are brought onto the site. The IWMP must prohibit on-site storage or disposal of mulch or green waste that may contain weed material. Mulch or green waste will be removed from the site in a covered vehicle to prevent seed dispersal, and transported to a licensed landfill or composting facility.</p> <p>The IWMP will specify guidelines for any soil, gravel, mulch, or fill material to be imported into the Proposed Project area, transported from site to site within the Proposed Project area, or transported from the Proposed Project area to an off-site location, to prevent the introduction or spread of weeds to or from the Proposed Project area.</p> <p><b>Monitoring.</b> The IWMP shall specify methods to survey for weeds during pre-construction, construction, and restoration phases; and shall specify qualifications of botanists responsible for weed monitoring and identification. It must include a monitoring schedule to ensure timely detection and immediate control of weed infestations to prevent further spread. Surveying and monitoring for weed infestations shall occur at least two times per year, to coincide with the early detection period for early season and late season weeds (i.e., species germinating in winter and flowering in late winter or spring, and species germinating later in the season and flowering in summer or fall). It also must include methods for marking invasive weeds on the ROW, and recording and communicating these locations to weed control staff. The map of weed locations (discussed above) shall be updated at least once a year. The monitoring section shall also describe methods for post-eradication monitoring to evaluate success of control efforts and any need for follow-up control.</p> <p><b>Control.</b> The IWMP must specify manual and chemical weed control methods to be employed. The IWMP shall include only weed control measures with a demonstrated record of success for target weeds, based on the best available information. The plan shall describe proposed methods for promptly scheduling and implementing control activity when any weed infestation is located, to ensure effective and timely weed control. Weed infestations must be controlled or eradicated as soon as possible upon discovery, and before they go to seed, to prevent further spread. All proposed weed control methods must minimize the extent of any disturbance to native vegetation, limit ingress and egress to defined routes, and avoid damage from herbicide use or other control methods to any environmentally sensitive areas identified within or adjacent to the ROW.</p> <p>Weed infestations will be treated at a minimum of once annually until eradication, suppression, or containment goals are met. For eradication, when no new seedlings or resprouts are observed for three consecutive, normal</p>		

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	<p>rainfall years, <i>OR</i> for five consecutive years regardless of rainfall, the weed occurrence can be considered eradicated and weed control efforts may cease for the site.</p> <p>Manual control shall specify well-timed removal of weeds or their seed heads with hand tools; seed heads and plants must be disposed of in accordance with guidelines from the Riverside or San Bernardino County Agricultural Commissioners, if such guidelines are available.</p> <p>The chemical control section must include specific and detailed plans for any herbicide use. It must indicate where herbicides will be used, which herbicides will be used, and specify techniques to be used to avoid drift or residual toxicity to native vegetation or special-status plants, consistent with BLM's <i>Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States</i> (BLM, 2007) and <i>National Invasive Species Management Plan</i> (NISC, 2008). Only state and BLM-approved herbicides may be used. Herbicide treatment will be implemented by a Licensed Qualified Applicator. Herbicides shall not be applied during or within 72 hours of predicted rain. Only water-safe herbicides shall be used in riparian areas or within channels (engineered or not) where they could run off into downstream areas. Herbicides shall not be applied when wind velocities exceed six (6) mph. All herbicide applications will follow U.S. Environmental Protection Agency label instructions and will be in accordance with federal, state, and local laws and regulations.</p> <p><b>Reporting schedule and contents.</b> The IWMP shall specify reporting schedule and contents of each report.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE's PSE status); CV-MSHCP (all, regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>		

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VEG-3a:</b> Jurisdictional waters and wetlands</p>	<p><b>Minimize impacts and ensure no net loss for jurisdictional waters and wetlands.</b></p> <p><b>Impact minimization.</b> Project design and construction activities shall minimize impacts to drainage features, including ephemeral or intermittent washes, streams, and wetlands to the extent feasible. This mitigation measure is not limited to wetlands or mapped “blue-line” streams, but encompasses all jurisdictional waters, generally including intermittent channels or washes.</p> <p><b>No net wetlands loss and watercourse impacts minimization.</b> SCE shall prepare an HMMP [Habitat Mitigation and Monitoring Plan] which will include restoration or compensation mitigation to assure no net loss of wetland acreage or wetland habitat value from direct or indirect project impacts, including reduction of wetland acreage, and downstream or upstream effects to channels or their associated habitat. The no net loss standard shall be reached through (1) ecological restoration or revegetation of temporarily disturbed areas to fully replace habitat extent and habitat value, and (2) compensation at a ratio of 1:1 to replace permanently impacted non-wetland jurisdictional areas, and at 3:1 to replace permanently impacted state or federally jurisdictional wetland areas. Restoration and compensation mitigation for impacts to jurisdictional waters shall conform to the requirements of Mitigation Measures VEG-1d (Restore or revegetate temporary disturbance areas) and VEG-1e (Compensate for permanent habitat loss). All wetlands and watercourses, whether intermittent or perennial, will be retained to the extent feasible, and appropriate setbacks or other means will be employed to prevent adverse impacts to surface waters or associated habitat values. The HMMP shall incorporate wetland/water permit requirements and shall be subject to review and approval by the CPUC and BLM. All restoration or compensation mitigation described in the HMMP shall be implemented in full. In the case of any conflict between the mitigation ratios or other requirements specified in wetland/water permits for the project and the mitigation ratios or other requirements specified in this mitigation measure, the higher mitigation ratios and more stringent requirements shall apply.</p> <p><b>Clean Water Act and California Fish and Game Code permit compliance.</b> SCE shall not proceed with any alteration or fill activities in potentially jurisdictional waters until obtaining applicable permits or authorizations, or written agency confirmation that no permit or authorization is required. SCE shall implement all terms or conditions of each permit or authorization. Regardless of any conditions specified in permits or authorizations, SCE shall prevent contaminants or pollutants from entering any state or federal jurisdictional waters.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE’s PSE status); CV-MSHCP (all, regardless of SCE’s PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>SCE shall prepare a Habitat Mitigation and Management Plan for CPUC/BLM review and approval. [SCE to provide draft HMMP based on mitigation requirements, and finalize once permit approvals are obtained.]</p> <p>No alteration or fill activities in potential jurisdictional waters until applicable permits or authorizations obtained.</p>	
<p><b>VEG-4a:</b> Effects on special status plants</p>	<p><b>Minimize and mitigate impacts to special-status plants.</b></p> <p><b>Pre-construction survey.</b> SCE shall conduct focused surveys for federal- and state-listed and other special-status plants. All special-status plant species (including listed threatened or endangered species, and all CRPR 1A, 1B, 2, 3, and 4 ranked species) impacted by project activities shall be documented in pre-construction survey reports. Surveys shall be conducted during the appropriate season in all suitable habitat located within the project disturbance areas and access roads and within 100 feet of disturbance areas and access roads, and any additional area where direct or indirect effects to soils or vegetation could affect special-status plants (if present). Surveys shall be conducted by a qualified botanist. The field surveys and reporting must conform to current CDFW botanical field survey protocol (CDFG, 2009) or more recent updates, if available. The reports will describe any conditions that may have prevented target species from being located or identified, even if they are present as dormant seed or below-ground rootstock (e.g., poor rainfall, recent grazing, or wildfire). In some cases, follow-up surveys may be necessary to adequately evaluate impacts. Prior to construction, SCE shall submit pre-construction field survey reports along with maps showing locations of survey areas and special-status plants to the CPUC and BLM for review and approval in consultation with CDFW and USFWS.</p> <p>If federally or state-listed plants would be affected, SCE shall notify BLM, USFWS, and CDFW to obtain the appropriate permits from CDFW and USFWS and comply with permit requirements. Additional conservation</p>	<p>Prior to construction, SCE to conduct focused surveys for federal- and state-listed and other special-status plants.</p> <p>Surveys and report must conform to current CDFW protocols.</p> <p>Pre-construction survey reports with maps of survey areas to be submitted for review and approval.</p> <p>If special-status plants are identified that could be impacted by project activities, these are to be addressed in the Habitat</p>	

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	<p>measures to protect or restore listed plant species or their habitat may be required by BLM, CDFW, or USFWS before impacts are authorized.</p> <p><b>Native cactus and Yucca.</b> Most native cactus and shrubby <i>Yucca</i> species (Joshua tree and Mohave yucca) can be successfully salvaged and transplanted, and yuccas often provide an important vertical component to wildlife habitat. Therefore, native cactus (excluding chollas in the genus <i>Cylindropuntia</i>) and yuccas (excluding chaparral yucca, <i>Y. whipplei</i>), shall be avoided or salvaged according to the strategies described below.</p> <p><b>Mitigation.</b><sup>1</sup> SCE shall mitigate impacts to any state or federally listed plants or CRPR 1 or 2 ranked plants that may be located on the project disturbance areas or surrounding buffer areas through one or a combination of the following strategies.</p> <p>Avoidance of special-status plants will be the preferred strategy wherever feasible. Where avoidance is not feasible, and the project would directly or indirectly affect more than 10 percent of a local occurrence, by either number of plants or extent of occupied habitat, SCE shall prepare and implement a mitigation plan to consist of off-site compensation, salvage, or horticultural propagation and off-site introduction.</p> <ul style="list-style-type: none"> <li>▪ <b>Avoidance.</b> Where feasible, towers, access roads, and other project work areas shall be located to avoid or minimize impacts to special-status plants. Effective avoidance through project design shall include a buffer area surrounding each avoided occurrence, where no project activities will take place. The buffer area will be clearly staked, flagged, and signed for avoidance prior to the beginning of ground-disturbing activities, and maintained throughout the construction phase. The buffer zone shall be of sufficient size to prevent direct or indirect disturbance to the plants from construction activities, erosion, inundation, or dust. The size of the buffer will depend upon the proposed use of the immediately adjacent lands and the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, water availability, edaphic physical and chemical characteristics), to be specified by a qualified biologist or botanist. At minimum, the buffer for trees or shrubs species shall be equal to twice the drip line (i.e., two times the distance from the trunk to the canopy edge) to protect and preserve the root systems. The buffer for herbaceous species shall be a minimum of 50 feet from the perimeter of the occupied habitat or the individual. If a smaller buffer is necessary due to other project constraints, SCE will develop and implement site-specific monitoring and put other measures in place to avoid the take of the species, with the approval of the CPUC and BLM, in consultation with USFWS and CDFW.</li> <li>▪ <b>Off-site compensation.</b> SCE shall provide compensation lands consisting of habitat occupied by the impacted CRPR 1 or 2 ranked plants at a 1:1 ratio of acreage and number of plants for any occupied habitat affected by the project. Occupied habitat will be calculated on the project site and on the compensation lands as including each special-status plant occurrence and a surrounding 100-foot buffer area. Off-site compensation shall be incorporated into the project's Habitat Compensation Plan (under Mitigation Measure VEG-1e), for review and approval by the CPUC and BLM in consultation with CDFW and USFWS.</li> <li>▪ <b>Salvage.</b> SCE shall consult with a qualified restoration ecologist or horticulturist at a qualified institution such as Rancho Santa Ana Botanic Garden (RSABG) regarding the feasibility and likely success of salvage efforts for each species. If salvage is deemed to be feasible, based on prior success with similar species, then SCE shall prepare and implement a Special-status Plant Salvage and Relocation Plan, to be reviewed and approved by the CPUC and BLM, in consultation with CDFW and USFWS, prior to direct or indirect disturbance of any occupied habitat. For special-status plants, the goal shall be establishment of a new viable occurrence, equal or greater in extent and numbers to the affected occurrence. For cacti and yuccas, the goal shall be maximum practicable survivorship of salvaged plants. The Plan will include at minimum: (a) species and locations of plants identified for salvage; (b) criteria for determining whether an individual plant is appropriate for salvage; (c)</li> </ul>	<p>Restoration and Revegetation Plan (HRRP) [See MM VEG-1d]</p> <p>Permits are to be obtained as required.</p>	

<sup>1</sup> An occurrence for a plant is defined as any population or group of nearby populations located more than 0.25 miles from any other population (CDFW, 2009).



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	<p>the appropriate season for salvage; (d) equipment and methods for collection, transport, and re-planting plants or seed banks, to retain intact soil conditions and maximize success; (e) for shrubs, cacti, and yucca, a requirement to mark each plant to identify the north-facing side prior to transport, and replant it in the same orientation; (f) details regarding storage of plants or seed banks for each species; (g) location of the proposed recipient site, and detailed site preparation and plant introduction techniques for top soil storage, as applicable; (h) a description of the irrigation, weed control, and other maintenance activities; (i) success criteria, including specific timeframe for survivorship and reproduction of each species; and (j) a detailed monitoring program, commensurate with the Plan's goals.</p> <p>Annual monitoring reports shall be submitted to CPUC and BLM. Reports shall include, but not be limited to, details of plants salvaged, stored, and transplanted (salvage and transplanting locations, species, number, size, condition, etc.); adaptive management efforts implemented (date, location, type of treatment, results, etc.); and evaluation of success of transplantation.</p> <p>▪ <b>Horticultural propagation and off-site introduction.</b> If salvage and relocation is not believed to be feasible for special-status plants, then SCE shall consult with RSABG, or another qualified entity, to develop an appropriate experimental propagation and relocation strategy, based on the life history of the species affected. The Plan will include at minimum: (a) collection and salvage measures for plant materials (e.g., cuttings), seed, or seed banks, to maximize success likelihood; (b) details regarding storage of plant, plant materials, or seed banks; (c) location of the proposed propagation facility, and proposed methods; (d) time of year that the salvage and other practices will occur; (e) success criteria; and (f) a detailed monitoring program, commensurate with the Plan's goals.</p> <p><b>Implementation locations outside of MSCHPs:</b> This mitigation measure shall apply to all lands in San Bernardino County, on all BLM lands, and they are recommended for implementation on Morongo Tribal Lands.</p> <p><b>Implementation locations for WR-MSHCP and CV-MSHCP:</b> If SCE does not obtain PSE status under the WR-MSHCP or CV-MSHCP, this mitigation measure shall apply in its entirety within the relevant MSHCP area. The Pre-construction Survey and Native Cactus and Yucca portions of this mitigation measure shall apply within both MSHCP areas regardless of SCE's PSE status. If SCE obtains PSE status under either MSHCP, mitigation for the project's impacts to special-status plants covered under the Plan may be implemented according to the requirements of the MSHCP, and the remainder of this mitigation measure will not apply within the MSHCP area for species covered under the Plan. For potential impacts to special-status plants not covered under the Plan, this measure will apply in full.</p>		
<p><b>VEG-5a:</b> Comply with tree removal requirements</p>	<p><b>Comply with local tree removal or resource protection policies.</b> SCE shall obtain permits from local jurisdictions and BLM for tree removal and other plant removal or harvest, in accordance with each applicable ordinance or policy, prior to removal or other impacts to regulated trees or other plants.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE's PSE status); CV-MSHCP (all, regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>SCE to obtain required permits or approvals. [This may occur in During Construction period].</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VEG-5b:</b> MSHCP consistency</p>	<p><b>Ensure MSHCP consistency.</b> If SCE does not obtain PSE status under either the WR-MSHCP or CV-MSHCP, SCE shall prepare an analysis equivalent to the WR-MSHCP Consistency Analysis or the CV-MSHCP Joint Project Review Requirements, as appropriate. This analysis shall identify any potential conflict with the WR-MSHCP or CV-MSHCP and specify detailed measures that SCE will implement, as a non-participant in either plan, to prevent such conflict through habitat compensation or other measures. The analysis and its included specifications for avoiding MSHCP conflicts shall be subject to review and approval by CPUC and BLM, in consultation with CDFW, USFWS, the Western Riverside County Regional Conservation Authority, and the CVCC. The analysis and full implementation of each measure shall be completed prior to the start of any ground-disturbing activity within the WR-MSHCP or CV-MSHCP area.</p> <p><b>Implementation locations:</b> WR-MSHCP (all, if SCE does not obtain PSE status); CV-MSHCP (all, if SCE does not obtain PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>If PSE status not obtained, SCE to prepare analysis equivalent to WR-MSHCP Consistency Analysis or CV-MSHCP Joint Project Review Requirements, as appropriate, and provide to CPUC/BLM.</p> <p>Analysis and implementation required prior to ground-disturbing activities within the MSHCP area.</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Biological Resources – Wildlife</b> (NOTE: The BIO Wildlife APMs have been superseded by the following mitigation measures.)			
<p><b>WIL-1a:</b> Pre-construction biological surveys</p>	<p><b>Conduct pre-construction biological resources surveys.</b> SCE shall assign qualified biologists to perform pre-construction biological surveys at each project work area and access route, and in the area surrounding each work site or access route. Survey distances will vary, as appropriate, based on target species and as stipulated by project work plans and mitigation plans, but will be no less than 300 feet surrounding each work site and along any access route being created or improved. (Improvement is considered to be both ‘drive and crush’ and any road work that causes greater disturbance than light blading of previously existing roads.) For project access along existing routes or routes improved during an earlier phase of the project, the survey requirement will be 100 feet. An exception would be if a greater distance is stipulated in other applicable project work plans or mitigation measures. Where suitable nest sites for raptors are present, the pre-construction surveys for raptor nests will extend to a 500-foot area surrounding the work area or road.</p> <p>Pre-construction surveys shall be planned and implemented to identify locations of special-status plants and wildlife and nesting birds occurring at work areas, other portions of the ROW, or in adjacent buffer areas. Specific pre-construction survey methods or protocols will vary according to the resources which may be present at any given site, and according to season. At minimum, SCE shall complete pre-construction surveys 10 days prior to beginning work in any given area, and repeat the surveys if the work site remains inactive for a period of ten days or more. During nesting season, a qualified biologist shall complete nesting bird surveys no more than four days prior to beginning work at any given area, and repeat the surveys regularly so long as work continues at the site during the nesting season.</p> <p>SCE shall submit resumes of all biologists performing pre-construction biological surveys to the CPUC and BLM for review and approval, in coordination with CDFW and USFWS. Results of pre-construction surveys shall be submitted to CPUC and BLM for review and approval and no work shall occur until the CPUC Environmental Monitor has validated the survey results and any applicable resource and work area boundary staking. Each pre-construction survey report shall include methods and results of the preconstruction survey, and a list of biological resources detected at each site during prior focused surveys or pre-construction surveys. The pre-construction survey report format and contents shall be subject to CPUC and BLM review and approval.</p> <p>SCE also shall conduct pre-construction “sweeps” of each work site immediately prior to beginning construction or disturbance work, to identify any vulnerable wildlife that may have entered the site. Based on the results of pre-construction surveys and sweeps, SCE or its contractor shall observe buffer areas or other access or activity restrictions to minimize potential impacts to the resources. SCE shall provide documentation of the methods and results of all pre-construction surveys, and follow-up buffer areas or other avoidance measures that are implemented, to the CPUC and BLM.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE’s PSE status); CV-MSHCP (all, regardless of SCE’s PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>Unless otherwise specified in a work plan or mitigation measure, biological survey distances:</p> <ul style="list-style-type: none"> <li>▪ 300 feet minimum around work areas and along new or improved access routes.</li> <li>▪ 100 feet along existing routes.</li> <li>▪ 500 feet for suitable nest sites for raptors.</li> </ul> <p>Timing of surveys before construction:</p> <ul style="list-style-type: none"> <li>▪ General: 10 days prior to beginning work in area. Repeat if site is inactive for 10 or more days.</li> <li>▪ Nesting Birds: No more than 4 days during nesting season. Repeat survey regularly as long as work continues at site during nesting season.</li> </ul> <p>Survey results to be submitted to CPUC/BLM and validated (including boundary staking) before any work begins.</p> <p>“Sweep” of work site immediately prior to work.</p> <p>Resumes of biologists to be submitted to CPUC/BLM for review and approval</p>	
<p><b>WIL-1b:</b> Wildlife impact avoidance and minimization</p>	<p><b>Ensure wildlife impact avoidance and minimization.</b> SCE shall undertake the following measures during the construction, restoration, and O&amp;M phases to avoid or minimize impacts to wildlife resources. Implementation of all measures shall be subject to review and approval by the CPUC and BLM in consultation with CDFW and USFWS. Impacts to nesting birds are addressed separately in Mitigation Measure WIL-1c (Prepare and implement a Nesting Bird Management Plan).</p> <ul style="list-style-type: none"> <li>▪ <b>Minimize traffic impacts.</b> SCE will specify and enforce a maximum 15 mile per hour vehicle speed limit on access roads within the ROW and project vicinity. No project-related pedestrian or vehicle traffic will be permitted outside defined work site boundaries (as marked on the site according to Mitigation Measure VEG-1c (Minimize native vegetation and habitat loss)).</li> </ul>	<p>For birds, see MM WIL-1c: Prepare and implement a Nesting Bird Management Plan</p> <p>15 mph speed limit on access roads.</p> <p>Parking only within defined work site boundaries.</p>	

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	<ul style="list-style-type: none"> <li>▪ <b>Minimize lighting impacts.</b> Night lighting, when in use, shall be designed, installed, and maintained to prevent side casting of light towards surrounding fish or wildlife habitat.</li> <li>▪ <b>Avoid use of toxic substances.</b> Soil bonding and weighting agents used for dust suppression on unpaved surfaces shall be non-toxic to wildlife and plants.</li> <li>▪ <b>Minimize noise and vibration impacts.</b> To minimize disturbance to wildlife nesting or breeding activities in surrounding habitat, project-related helicopter use shall be avoided or managed to the extent feasible from February 1 to August 31. Unnecessary noise (e.g., blaring radios) shall be avoided.</li> <li>▪ <b>Water.</b> Potable and non-potable water sources such as tanks, ponds, and pipes shall be covered or otherwise secured to prevent animals (including birds) from entering. Prevention methods may include storing all water within closed tanks, covering open storage ponds or tanks with 2 centimeter netting, or other means as applicable. Water applied to dirt roads and construction areas for dust abatement shall use the minimal amount needed to meet safety and air quality standards. Water sources (e.g., hydrants, tanks, etc.) shall be checked periodically by biological monitors to ensure they are not creating open water sources by leaking or consistently overfilling trucks.</li> <li>▪ <b>Worker guidelines.</b> All trash and food-related waste shall be contained in vehicles or covered trash containers and removed from the site regularly. Workers shall not feed wildlife or bring pets to the project site. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons.</li> <li>▪ <b>Wildlife netting or exclusion fencing.</b> SCE may install temporary or permanent netting or fencing around equipment, work areas, or project facilities to prevent wildlife exposure to hazards such as toxic materials or vehicle strikes, or prevent birds from nesting on equipment or facilities. Bird deterrent netting will be maintained free of holes and will be deployed and secured on the equipment in a manner that, insofar as possible, prevents wildlife from becoming trapped inside the netted area or within the excess netting. The biological monitor will inspect netting (if installed) twice daily, at the beginning and close of each work day, with the exception of netting installed in established material yards, which will be inspected at least once daily. The biological monitor will inspect exclusion fence (if installed) weekly and will inform SCE of any needed repairs; SCE shall promptly repair any damage to the exclusion fencing.</li> <li>▪ <b>Wildlife entrapment.</b> Project-related excavations shall be secured to prevent wildlife entry and entrapment. Holes and trenches shall be backfilled, securely covered, or fenced. Excavations that cannot be fully secured shall incorporate appropriate wildlife ramp(s) at a slope of no more than a 3:1 ratio, or other means to allow trapped animals to escape. Biological monitors shall provide guidance to construction crews to ensure that wildlife ramps or other means are sufficient to allow trapped animals to escape. At the end of each work day, a biological monitor shall ensure that excavations have been secured or provided with appropriate means for wildlife escape.</li> </ul> <p>All pipes or other construction materials or supplies will be covered or capped in storage or laydown areas. No pipes or tubing will be left open either temporarily or permanently, except during use or installation. Any construction pipe, culvert, or other hollow materials will be inspected for wildlife before it is moved, buried, or capped.</p> <p><b>Dead animals.</b> Dead animals of non-special-status species found on unpaved project roads, work areas, or the ROW shall be reported to the appropriate local animal control agency within 24 hours. A biological monitor shall safely move the carcass out of the road or work area as needed. Dead animals of special-status species found on unpaved project roads, work areas, or the ROW shall be reported to CDFW within one work day and the carcass handled as directed by CDFW.</p> <p><b>Injured wildlife.</b> SCE shall create and implement guidelines for dealing with injured or entrapped wildlife found on or near project roads, work areas, or the ROW, and provide these guidelines to all biological monitors. If an</p>	<p>Prevent side casting of night lighting.</p> <p>Dust suppressants to be non-toxic to wildlife/plants.</p> <p>Minimize noise/vibration during nesting/breeding season 3/1 - 8/31. Avoid unnecessary noise.</p> <p>Cover or secure stored water sources to prevent wildlife/bird access (using closed tanks, lids, netting, etc.). Use minimum water for dust abatement.</p> <p>Ensure no ponding of water at sources.</p> <p>Contain food-related waste and remove from site regularly. Do not feed wildlife, or bring pets to site.</p> <p>No firearms.</p> <p>Use netting or fencing to prevent wildlife exposure to hazards.</p> <p>Maintain bird deterrent netting free of holes and secure to prevent wildlife access. Inspect netting twice daily, except in material yards inspect once daily.</p> <p>Install wildlife exit ramps in open excavations at end of workday.</p> <p>Cover or cap stored pipes and other hollow materials. Inspect for wildlife before moving, burying, or capping.</p> <p>Report non-special-status dead animals to animal control agency; monitor move carcass if needed. For special-status species, report to CDFW and handle carcass as directed.</p>	



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

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	<p>animal is entrapped, a qualified biological monitor shall free the animal if feasible, or work with construction crews to free the animal, in compliance with applicable safety regulations and project requirements. If biological monitors cannot free the animal or the animal is too large or dangerous for monitors to handle, SCE shall contact and work with animal control, CDFW, or other qualified party to obtain assistance for the animal as soon as possible.</p> <p>SCE shall ensure that one or more qualified biological monitors receive training in the safe and proper handling and transport of injured wildlife and are provided with the appropriate equipment. These trained and equipped monitors shall be available to capture and transport injured wildlife to a local wildlife rehabilitator or veterinarian as needed. If the injured animal is too large or dangerous for monitors to handle, or a trained and equipped monitor is not available, SCE shall contact and work with a local wildlife rehabilitator, animal control, CDFW, or other qualified party to obtain assistance for the animal as soon as possible. SCE shall bear the costs of veterinary treatment and rehabilitation for any wildlife injured by project-related activities and any injured wildlife found on or near project roads, work areas, or the ROW, unless the injuries are clearly not project-related, as determined by a qualified biologist. Additionally, any entrapped or injured special-status species found on project roads, work areas, or the ROW shall be reported to the appropriate resource agency within one work day.</p> <p><b>Rattlesnake guidelines.</b> Prior to the start of construction, SCE shall prepare and implement guidelines for dealing with rattlesnakes found in or near project work areas and access roads and provide these guidelines to all biological monitors, safety staff, and other personnel. Killing or harming rattlesnakes or other wildlife is not authorized. If SCE determines that it is appropriate for biological monitors or other project personnel to handle rattlesnakes, SCE shall ensure that an adequate number of qualified individuals are trained in the safe and proper handling of rattlesnakes and provided with the appropriate safety and snake handling equipment, including a secure storage container for transporting snakes. These trained and equipped individuals shall be available to remove rattlesnakes found in or near project work areas and access roads as needed and relocate them to appropriate nearby habitat. Other project personnel shall not harass, or handle rattlesnakes, except as required to maintain immediate safety or in accordance with the guidelines developed by SCE. Handling and relocation of rattlesnakes shall be documented, and the species of rattlesnake determined whenever possible. If a special-status rattlesnake is relocated, documentation shall be submitted to CPUC, BLM, and CDFW.</p> <p>Alternately, SCE may determine that project personnel shall not handle or approach rattlesnakes. If so, the guidelines shall specify an alternate course of action for rattlesnake encounters, such as avoiding work activity near the snake and monitoring its location and activity until it leaves the area.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE's PSE status); CV-MSHCP (all, regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>SCE create/implement guidelines for dealing with injured or entrapped wildlife. Free if feasible and safe to do so. Contact animal control or CDFW for animals too large or dangerous to assist. At least one bio monitor to be trained in handling/transport of injured wildlife.</p> <p>SCE prepare/implement rattlesnake guidelines. Killing or harming is not authorized. Individuals trained in safe handling of rattlesnakes to be available. Document handling and relocation, and species of rattlesnake, if possible.</p> <p>Alternatively, avoid work near snake and monitor its location.</p>	
<p><b>WIL-1c:</b> Nesting bird management</p>	<p><b>Prepare and implement a Nesting Bird Management Plan.</b> SCE shall prepare a Nesting Bird Management Plan (NBMP) in coordination with CPUC, BLM, CDFW, and USFWS. The NBMP shall describe methods to minimize potential project effects to nesting birds, and avoid any potential for unauthorized take. Project-related disturbance including construction and pre-construction activities shall not proceed within 300 feet of active nests of common bird species or 500 feet of active nests of raptors or special-status bird species (except for golden eagle as described in Mitigation Measure WIL-2f) until approval of the NBMP by CPUC and BLM in consultation with CDFW and USFWS.</p> <p><b>NBMP Content.</b> The NBMP shall include: (1) definitions of default nest avoidance buffers for each species or group of species, depending on characteristics and conservation status for each species; (2) a notification procedure for buffer distance reductions should they become necessary; (4) a rigorous monitoring protocol, including qualifications of monitors, monitoring schedule, and field methods, to ensure that any project-related effects to nesting birds will be minimized; and (5) a protocol for documenting and reporting any inadvertent contact or effects to birds or nests.</p>	<p>Prepare and submit a NBMP.</p> <p>Buffers until NBMP is approved:</p> <ul style="list-style-type: none"> <li>▪ 300 feet for common birds</li> <li>▪ 500 feet for raptors or special status birds (but see MM WIL-2f for golden eagle)</li> </ul> <p>Contents of what is in NBMP are detailed in MM text. NBMP should be checked against all MM requirements.</p>	

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	<p>The paragraphs below describe the NBMP requirements in further detail.</p> <p><b>Background.</b> The NBMP shall include the following:</p> <ul style="list-style-type: none"> <li>▪ A summary of applicable state and federal laws and regulations, including definition of what constitutes a nest or active nest under state and federal law.</li> <li>▪ A procedure for amendment of the NBMP, should there be changes in applicable state or federal regulations or as necessary for adaptive management upon approval by CDFW, USFWS, CPUC, and BLM.</li> <li>▪ A list of bird species potentially nesting on or near the ROW or other work areas, indicating approximate nesting seasons, nesting habitat, typical nest locations (e.g., ground, vegetation, structures, etc.), tolerance to disturbance (if known) and any conservation status for each species. This section will also note any species that do not require avoidance measures (e.g., rock pigeons).</li> <li>▪ A list of the types of project activities (construction, operations, and maintenance) that may occur during nesting season, with a short description of the noise and physical disturbance resulting from each activity.</li> <li>▪ Clearing of any vegetation, site preparation in open or barren areas, or other project-related activities that may adversely affect breeding birds shall be scheduled outside the nesting season, as feasible.</li> </ul> <p><b>Pre-construction nest surveys.</b> Pre-construction nest surveys will be conducted prior to any construction activities scheduled during the breeding period. For this project, the breeding period will be defined as January 1 through August 31. The NBMP shall describe the proposed field methods, survey timing, and qualifications of field biologists. Field biologist qualifications will be subject to review by CPUC and BLM. The avian biologists conducting the surveys shall be experienced bird surveyors and familiar with standard nest-locating techniques such as those described in Martin and Guepel (1993). Nest surveys will focus on visual searches for nest locations and observations of bird activities and movement to detect nesting activity (e.g., carrying nest materials or food, territorial displays, courtship behavior). Surveys shall be conducted in accordance with the following guidelines.</p> <ul style="list-style-type: none"> <li>▪ Surveys shall cover all potential nesting habitat within the ROW or other work areas and within 500 feet of these areas for raptors and 300 feet for non-raptors.</li> <li>▪ Pre-construction surveys shall be conducted for each work area, no longer than 10 days prior to the start of construction activity. [Partial MM text]</li> <li>▪ SCE shall provide the CPUC and BLM a report describing the findings of the pre-construction nest surveys, including the time, date, and duration of the survey; identity of the surveyor(s); a list of species observed; and electronic data identifying nest locations and the boundaries of buffer zones. The electronic data set will be updated following each pre-construction nest survey throughout the nesting season. The format and contents of this report will be described in the draft NBMP and will be subject to review and approval by CPUC and BLM.</li> </ul> <p><b>Nest Buffers and Acceptable Activities</b></p> <p>The NBMP shall specify measures to delineate buffers on the work site, to consist of clearly visible marking and signage. Buffer locations shall be communicated to the construction contractor, and shall remain in effect until formally discontinued (when each nest is no longer active). In addition, the NBMP shall specify measures to ensure the buffers are observed, including a direct communication and decision protocol to stop work within buffer areas. In some cases, active nests may be found while work is underway. Therefore, the NBMP shall include a protocol for stopping ongoing work within the buffer area, securing the work site, and removing personnel and equipment from the buffer.</p> <p>The NBMP shall describe proposed measures to avoid take or adverse effects to nests, such as buffer distances from active nests. These measures shall be based on the specific nature of the bird species and conservation status, and other pertinent factors.</p>		

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	<p>The NBMP will identify bird species (or groups of species) that are relatively tolerant or intolerant of human activities and specify smaller or larger buffer distances as appropriate for each species. If no information is available to specify a buffer distance for a species, then the NBMP shall specify 300 feet as a standard buffer distance, and 500 feet for raptors and special-status species. Nest management for listed threatened or endangered species will be prescribed in a USFWS Biological Opinion, CDFW Incidental Take Permit, or both. All applicable avoidance measures, including buffer distances, must be continued until nest monitoring (below) confirms that the nestlings have fledged and dispersed, or the nest is no longer active.</p> <p>For each special-status species potentially nesting within or near project work areas, the NBMP shall specify applicable buffers and any additional nest protection measures, specialty monitoring, or restrictions on work activities, if needed.</p> <p>The NBMP shall identify acceptable work activities within nest buffers (e.g., pedestrian access for inspection or BMP repair) including conditions and restrictions, and any monitoring required. The NBMP shall include pictorial representation showing buffer distances for ground buffers, vertical helicopter buffers, and horizontal helicopter buffers for nests near the ground and nests in towers.</p> <p><b>Nest Buffer Modification or Reduction</b></p> <p>At times, SCE or its contractor may propose buffer distances different from those approved in the NBMP. Buffer adjustments shall be reviewed and recommended by a qualified avian biologist who has been approved by CPUC and BLM in consultation with the CDFW and USFWS. The NBMP shall provide a procedure and timing requirements for notifying CPUC, BLM, CDFW, and USFWS of any planned adjustments to nest buffers. Separate and distinct procedures will be provided for special-status birds. The NBMP will list the information to be included in buffer reduction notifications in a standardized format.</p> <p><b>Nest deterrents.</b> The NBMP shall describe any proposed measures or deterrents to prevent or reduce bird nesting activity on project equipment or facilities, such as buoys, visual or auditory hazing devices, bird repellents, securing of materials, and netting of materials, vehicles, and equipment. It shall also include timing for installation of nest deterrents and field confirmation to prevent effects to any active nest; guidance for the contractor to install, maintain, and remove nest deterrents according to product specifications; and periodic monitoring of nest deterrents to ensure proper installation and functioning and prevent injury or entrapment of birds or other animals. In the event that an active nest is located on project facilities, materials or equipment, SCE will avoid disturbance or use of the facilities, materials or equipment (e.g., by red-tag) until the nest is no longer active.</p> <p><b>Communication.</b> The NBMP shall specify the responsibilities of construction monitors in regards to nests and nest issues, and specify a direct communication protocol to ensure that nest information and potential adverse impacts to nesting birds can be promptly communicated from nest monitors to construction monitors, so that any needed actions can be taken immediately.</p> <p>The NBMP shall specify a procedure to be implemented following accidental disturbance of nests, including wildlife rehabilitation options. It also shall describe any proposed measures, and applicable circumstances, to prevent take of precocial young of ground-nesting birds such as killdeer or quail. For example, chick fences may be used to prevent them from entering work areas and access roads. Finally, the NBMP will specify a procedure for removal of inactive nests, including verification that the nest is inactive and a notification/approval process.</p> <p><b>Monitoring.</b> SCE shall be responsible for monitoring the implementation, conformance, and efficacy of the avoidance measures (above). The NBMP shall include specific monitoring measures to track any active bird nest within or adjacent to project work areas, bird nesting activity, project-related disturbance, and outcome of each nest. For nests with reduced buffers, SCE shall monitor each nest until nestlings have fledged and dispersed or until the nest becomes inactive. Nests with default buffers do not require further monitoring once construction work is completed in the area. New nests discovered after work completion in an area would not require</p>		

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	<p>monitoring. In addition, monitoring shall include pre-construction surveys, daily sweeps of work areas and equipment, and any special monitoring requirements for particular activities (tree trimming, vegetation removal, etc.) or particular species (noise monitoring, etc.). Nest monitoring shall continue throughout the breeding season during each year of the project's construction activities.</p> <p><b>Reporting.</b> Throughout the construction phase of the project, nest locations, project activities in the vicinity of nests (including helicopter traces), and any adjustments to buffer areas shall be updated and available to CPUC monitors on a daily basis. All buffer reduction notifications and prompt notifications of nest-related non-compliance and corrective actions will be made via email to CPUC monitors. The draft NBMP shall include a proposed format for daily and weekly reporting (e.g., spreadsheet available online, tracking each nest). In addition, the NBMP shall specify the format and content of nest data to be provided in regular monitoring and compliance reports. At the end of each year's nest season, SCE will submit an annual NBMP report to the CPUC, BLM, CDFW, and USFWS. Specific contents and format of the annual report will be reviewed and approved by the CPUC and BLM in consultation with CDFW and USFWS.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE's PSE status); CV-MSHCP (all, regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>		
<p><b>WIL-2a:</b> Desert tortoise protection</p>	<p><b>WIL-2a: Conduct desert tortoise surveys, monitoring, and avoidance.</b> Methods for clearance surveys, fence specification and installation, tortoise handling, artificial burrow construction, egg handling, and other procedures shall be consistent with those described in the USFWS (2009) <i>Desert Tortoise Field Manual</i> or more current guidance provided by CDFW and USFWS.</p> <p>Desert tortoise shall be handled only by a USFWS/CDFW permitted and authorized biologist (Authorized Biologist) following appropriate USFWS protocols and in compliance with appropriate regulatory permits. A biological monitor shall monitor construction activities in all areas with the potential to support desert tortoise. Observations of desert tortoise or sign shall be immediately communicated to the Authorized Biologist.</p> <p>Within suitable habitat for desert tortoise, SCE shall survey the project area for desert tortoise burrows and pallets within fourteen (14) days preceding the initial start of construction. Follow-up surveys shall also be conducted within fourteen (14) days preceding additional construction after a gap in significant construction activities of 60 calendar days or more. Surveys shall include 100 percent of the area to be disturbed and a surrounding buffer of 100 feet.</p> <p>Subject to authorization by CDFW and USFWS, tortoise burrows and pallets encountered within the disturbance area (if any) shall be conspicuously flagged by the surveying biologist(s) and avoided during construction activities. If a burrow suitable for desert tortoise cannot be avoided, it shall be excavated carefully using hand tools, by or under the supervision of an Authorized Biologist, and collapsed or blocked to prevent desert tortoise reentry. If the burrow is occupied, the Authorized Biologist may move the tortoise to another burrow.</p> <p>Project personnel shall inspect for desert tortoises under parked vehicles or equipment prior to moving same. If a desert tortoise is found beneath a vehicle or equipment, the vehicle or equipment shall not be moved until the tortoise has voluntarily moved to a safe distance away. If the tortoise does not move on its own accord after 20 minutes, the tortoise may be moved by an Authorized Biologist, subject to authorization by CDFW and USFWS.</p> <p>If a desert tortoise is found in a work area, the tortoise shall be allowed to passively traverse the site while construction in the immediate area is halted. If the tortoise does not move out of harm's way after 20 minutes, the tortoise may be moved by an Authorized Biologist, subject to conditions and authorization by CDFW and USFWS.</p> <p>Subject to authorization by CDFW and USFWS, desert tortoises shall be moved the minimum distance possible within appropriate habitat. In general, desert tortoise will not be moved in excess of 1,000 feet for adults and 300 feet for hatchlings. Desert tortoises that are moved shall be placed in the shade of a shrub. After being moved, the</p>	<p>Survey for desert tortoise over 100% of area to be disturbed plus 100 foot buffer.</p> <ul style="list-style-type: none"> <li>▪ 14 days prior to initial construction and</li> <li>▪ 14 days prior to construction if gap between significant construction activities is 60 days or more.</li> </ul> <p>Desert tortoise handling only by permitted Authorized Biologist.</p> <p>In work areas, tortoise burrows and pallets (shallow depressions under shrubs providing resting areas) to be flagged and avoided.</p> <p>Inspect under parked vehicles or equipment prior to moving.</p> <p>Limit distance tortoise to be moved – 1,000 feet adult, 300 feet hatchlings. Record moving in daily report.</p> <p>Substitute burrow may be constructed and monitored.</p>	



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	<p>desert tortoise shall be monitored to ensure its safety. Any time a tortoise is handled, the Authorized Biologist shall take photographs and record pertinent data in their daily monitoring report. This information shall be summarized and submitted to CPUC and BLM in annual environmental compliance reports.</p> <p>Subject to authorization by CDFW and USFWS, a desert tortoise removed from its burrow shall be placed in an unoccupied burrow of approximately the same size and orientation. If an existing burrow is unavailable, the Authorized Biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in the new burrow to ensure their safety.</p> <p>Subject to authorization by CDFW and USFWS, if a desert tortoise is moved at a time of the day when ambient temperatures are unfavorable (less than 40 degrees F or greater than 90 degrees F), it shall be held overnight in a clean cardboard box. The desert tortoise shall be kept in the care of the Authorized Biologist under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes will be appropriately discarded after one use.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply in desert tortoise habitat within the project area (Segments 5 and 6), subject to the stipulations listed above. Specifically, this mitigation measure applies on BLM lands, throughout the CV-MSHCP area (regardless of SCE's PSE status), and is recommended on all Morongo Tribal Lands. No suitable desert tortoise habitat is present within San Bernardino County and the WR-MSHCP; therefore, this mitigation measure does not apply in these jurisdictions.</p>	<p>Temps over 90 deg. F, hold overnight in clean cardboard box by Authorized Biologist, and released when temps are favorable. Discard box.</p>	
<p><b>WIL-2b:</b> Raven control</p>	<p><b>Prepare and implement Raven Monitoring, Management, and Control Plan.</b> SCE shall prepare and implement a Raven Monitoring, Management, and Control Plan (Raven Plan) consistent with USFWS raven management guidelines and that meets the approval of the CPUC and BLM in consultation with USFWS, and CDFW. The purpose of the Raven Plan shall be to minimize project-related predator subsidies and prevent any increases in raven numbers or activity within desert tortoise habitat during construction, restoration, and O&amp;M phases. The Plan shall address all project components and their potential effects on raven numbers and activity. The threshold for implementation of raven control measures shall be any increases in raven numbers from baseline conditions, as detected by monitoring to be implemented pursuant to the Plan. Regardless of raven monitoring results, SCE shall be responsible for all other aspects of raven management described in the Raven Plan, such as avoidance and minimization of project-related trash, water sources, or perch/roost/nest sites that could contribute to increased raven numbers. In addition, to offset the cumulative contributions of the project to desert tortoise impacts from increased raven numbers, SCE shall contribute to the USFWS Regional Raven Management Program. SCE shall:</p>	<p>SCE prepare, submit, and implement a Raven Monitoring, Management, and Control Plan (Raven Plan) as described in MM.</p> <p>30+ days prior to the start of construction, SCE contribute to the USFWS Regional Raven Management Program - a one-time payment of \$105 per acre of long-term or permanent project disturbance within the geographic range of desert tortoise, or as specified by the USFWS, to the National Fish and Wildlife Federation Renewable Energy Action Team raven control account</p>	

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	<p><b>1. Prepare and Implement a Raven Management Plan</b> that shall include, but shall not be limited to the following components. The Plan shall be reviewed and approved by CPUC, BLM, USFWS, and CDFW prior to the start of construction activities.</p> <ol style="list-style-type: none"> <li>Identify all potential project activities, structures, components, and other effects that could provide predator subsidies or attractants, including potential sources of food and water, and nesting materials, as well as nest or perch sites. These will include, but will not be limited to: waste food material, road-killed animals, water storage, potential pooling from leaks, dust control, or wastewater, debris from brush clearing, and perch or roost sites on project facilities and infrastructure.</li> <li>Describe management practices to avoid or minimize conditions that might increase raven numbers and predatory activities.</li> <li>Appoint a qualified biologist who will implement a monitoring schedule and field methods for the purpose of locating any ravens present in the project vicinity and detecting any increase in raven numbers or activity.</li> <li>Specify raven activity thresholds for implementation of control measures.</li> <li>Describe control practices for ravens to be implemented as needed based on the monitoring results.</li> <li>Address monitoring and nest removal during construction and for the life of the project.</li> <li>Describe reporting schedules and requirements.</li> </ol> <p><b>2. Contribute to the USFWS Regional Raven Management Program.</b> No later than 30 days prior to the start of construction, SCE shall contribute to the USFWS Regional Raven Management Program by making a one-time payment of \$105 per acre of long-term or permanent project disturbance within the geographic range of desert tortoise, or as specified by the USFWS, to the National Fish and Wildlife Federation Renewable Energy Action Team raven control account.</p> <p><b>Implementation locations:</b> This mitigation measure applies on BLM lands and is recommended on all Morongo Tribal Lands. No suitable desert tortoise habitat is present within San Bernardino County and the WR-MSHCP; therefore, this mitigation measure does not apply in these jurisdictions. In the CV-MSHCP, this mitigation measure shall apply in its entirety regardless of SCE's PSE status.</p>		
<p><b>WIL-2c:</b> Riparian bird protection</p>	<p><b>WIL-2c: Conduct surveys and avoidance for threatened or endangered riparian birds.</b> Construction activities shall avoid suitable habitat for listed riparian birds. If suitable habitat cannot be avoided, SCE shall consult with CDFW and USFWS and obtain appropriate take authorizations or permits. SCE shall implement the conservation measures contained within these permits.</p> <p>If construction activities will occur during the breeding season [in] potentially suitable habitat for listed riparian birds, a qualified biologist shall conduct protocol surveys of the project area and adjacent areas within 500 feet. USFWS protocol surveys shall be conducted for southwestern willow flycatcher, yellow-billed cuckoo, and least Bell's vireo. The surveys shall be of adequate duration to verify potential nest sites if work is scheduled to occur during the breeding season. Where protocol surveys determine that listed riparian birds are present, SCE shall conduct additional focused nest location surveys, to determine the locations of nests and territories. Survey areas shall include a 500-foot buffer around project disturbance areas.</p> <p>Protocol surveys, shall be conducted within one year prior to the start of construction and shall continue annually during each nesting season until completion of construction and restoration activities. At a minimum, surveys shall be conducted from 15 May to 17 July for southwestern willow flycatcher, from 10 April to 31 July for least Bell's vireo, and from 1 June to 31 August for yellow-billed cuckoo.</p> <p>These surveys may be modified through coordination with the USFWS, CDFW, BLM, and the CPUC based on the condition of habitat, the observation of the species, or avoidance of riparian areas during the breeding season. SCE shall submit documentation providing results of the protocol surveys for listed riparian birds to the CPUC and BLM for review and approval in consultation with USFWS and CDFW.</p>	<p>See also MM WIL-1c: Prepare and implement a Nesting Bird Management Plan.</p> <p>If construction to occur during breeding season in suitable habitat for listed riparian birds (southwestern willow flycatcher, yellow-billed cuckoo, and least Bell's vireo), then:</p> <ul style="list-style-type: none"> <li>▪ Conduct protocol surveys 1 year prior to start of construction</li> <li>▪ Continue annually until construction and restoration activities are complete</li> </ul> <p>Submit survey documentation to CPUC/BLM.</p>	

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	<p>If an active breeding territory or nest is confirmed, the CPUC, BLM, USFWS, and CDFW shall be notified immediately. All active nests shall be monitored on a weekly basis until the nestlings fledge or the nest becomes inactive. SCE shall provide monitoring reports to the CPUC and BLM for review in consultation with USFWS and CDFW.</p> <p>In coordination with the USFWS and CDFW, a 500-foot disturbance-free ground buffer and 1,000-foot vertical helicopter buffer shall be established around the active nest and demarcated by fencing or flagging. No construction or vehicle traffic shall occur within nest buffers, except on existing paved public roads.</p> <p>If an active breeding territory or nest is confirmed within 500 feet of any project activity site, SCE shall prepare and implement a Wildlife Noise Monitoring Plan throughout construction and demolition activities taking place while listed riparian birds occupy the nesting territory. Sound levels at the nest sites shall not exceed 8 dBA above ambient levels or 70 dBA (hourly average Leq), whichever is greater. Ambient levels will be established prior to initiation of construction and demolition, using the same methodology that will be used to take noise measurements during monitoring.</p> <p>If the hourly average noise threshold is exceeded, or if the biological monitor determines that construction activities are disturbing nesting birds, additional noise reduction techniques shall be implemented to reduce project noise below the thresholds. Additional noise monitoring will be conducted to verify the reduction of noise levels below the thresholds. Noise reduction techniques can include, but are not limited to:</p> <ul style="list-style-type: none"> <li>▪ Temporary noise barriers or sound walls</li> <li>▪ Noise pads or dampers</li> <li>▪ Replace and update noisy equipment</li> <li>▪ Moveable task noise barriers</li> <li>▪ Queue trucks to distribute idling noise</li> <li>▪ Locate vehicle access points and loading and shipping facilities away from the nest site</li> <li>▪ Reduce the number of noisy activities that occur simultaneously</li> <li>▪ Relocate noisy stationary equipment away from the nest sites</li> </ul> <p><b>Implementation locations:</b> This mitigation measure applies on BLM lands, throughout the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and within San Bernardino County, and is recommended on all Morongo Tribal Lands.</p>	<p>Establish 500 foot ground and 1,000 foot vertical (helicopter) buffer around nest(s)</p> <p>If nest within 500 feet, prepare and implement Wildlife Noise Monitoring Plan.</p>	
<p><b>WIL-2d:</b> Stephens' kangaroo rat</p>	<p><b>Conduct surveys and avoidance for Stephens' kangaroo rat.</b> Prior to the start of construction, within suitable habitat for Stephens' kangaroo rat (SKR), SCE shall conduct focused surveys to determine if SKR sign (burrows, scat, and etc.) is present in all areas within 100 feet of work sites or other project activities that would permanently or temporarily affect soils or vegetation. All surveys shall be conducted by a qualified biologist who holds the appropriate USFWS permits to conduct trapping surveys for SKR. If sign is present, then SCE shall conduct focused trapping surveys according to accepted protocols to determine presence or absence of SKR. If SKR are present, then SCE shall take additional measures to prevent or minimize take, such as installation of exclusion fences or other measures, subject to authorization by USFWS and CDFW.</p> <p>Construction activities shall avoid suitable SKR habitat to the extent feasible. If SKR habitat cannot be avoided, SCE shall consult with CDFW and USFWS and obtain appropriate take authorization or permits. SCE shall implement the conservation measures contained within these permits.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, throughout the WR-MSHCP area (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands. No suitable SKR habitat is present in the CV-MSHCP portions of the ROW or on BLM land, so this mitigation measure shall not apply within those areas.</p>	<p>Conduct focused surveys for SKR prior to construction in suitable habitat for SKR. Survey within 100 feet of work sites or project activities the affect soils or vegetation.</p> <p>If SKR sign present, conduct focused trapping surveys. If SKR present, take measures to prevent or minimize take.</p> <p>Comply with permits.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>WIL-2e:</b> Coastal California gnatcatcher</p>	<p><b>Conduct surveys and avoidance for coastal California gnatcatcher.</b> SCE shall conduct protocol level surveys for coastal California gnatcatchers (CAGN) in all areas of coastal sage scrub habitat that may be affected by the project. Survey areas will include a 500-foot buffer around project disturbance areas. Presence or absence of CAGN shall be determined prior to construction activities. In occupied CAGN habitat, SCE shall conduct additional focused nest location surveys to determine the locations of nests and territories. Survey areas shall include a 500-foot buffer around project disturbance areas.</p> <p>Surveys shall be conducted by qualified and permitted biologists. Surveys shall be of adequate duration to verify potential nest sites if work is scheduled to occur during the breeding season. Prior to construction, SCE shall submit documentation providing the results of the pre-construction focused surveys for CAGN to the CPUC and BLM for review and approval in consultation with USFWS and CDFW.</p> <p>Protocol or focused nest location surveys, as appropriate, shall be conducted within one year prior to the start of construction and shall continue annually until completion of construction and restoration activities.</p> <p>If an active breeding territory or nest is confirmed, the CPUC, BLM, USFWS, and CDFW shall be notified immediately and the observation will be included in the daily monitoring report. All active nests shall be monitored on a weekly basis until the nestlings fledge or the nest becomes inactive. SCE shall provide monitoring reports to the CPUC and BLM for review on a weekly basis.</p> <p>In coordination with the USFWS and CDFW, a 500-foot disturbance-free ground buffer and 1,000-foot vertical helicopter buffer shall be established around the active nest and demarcated by fencing or flagging. These buffers may be adjusted in consultation with USFWS and CDFW based on type of work activity performed. No construction or vehicle traffic shall occur within nest buffers, except on existing paved public roads.</p> <p>If an active breeding territory or nest is confirmed within 500 feet of any project activity site, the authorized nesting bird monitor shall monitor the nesting bird to evaluate impacts to the bird. If the construction, and associated noise, impacts nesting, in the opinion of the authorized nesting bird monitor, construction within 500 feet will immediately discontinue. If the authorized nesting bird monitor determines that construction may continue, SCE shall prepare and implement a Wildlife Noise Monitoring Plan throughout construction and demolition activities taking place while CAGN occupy the nesting territory. Sound levels at the nest sites shall not exceed 8 dBA above ambient levels or 70 dBA (hourly average Leq), whichever is greater. Ambient levels will be established prior to initiation of construction and demolition, using the same methodology that will be used to take noise measurements during monitoring.</p> <p>If the hourly average noise threshold is exceeded, or if the biological monitor determines that construction activities are disturbing nesting CAGN, additional noise reduction techniques shall be implemented to reduce project noise below the thresholds. Additional noise monitoring will be conducted to verify the reduction of noise levels below the thresholds. Noise reduction techniques can include, but are not limited to:</p> <ul style="list-style-type: none"> <li>▪ Temporary noise barriers or sound walls</li> <li>▪ Noise pads or dampers</li> <li>▪ Replace and update noisy equipment</li> <li>▪ Moveable task noise barriers</li> <li>▪ Queue trucks to distribute idling noise</li> <li>▪ Locate vehicle access points and loading and shipping facilities away from the nest site</li> <li>▪ Reduce the number of noisy activities that occur simultaneously</li> <li>▪ Relocate noisy stationary equipment away from the nest sites</li> </ul> <p>Construction activities shall avoid suitable habitat for CAGN, to the extent feasible. If suitable habitat cannot be avoided, SCE shall consult with CDFW and USFWS to obtain appropriate take authorization, permits, and/or Participating Special Entity (PSE) status. SCE shall implement the conservation measures contained within these permits.</p>	<p>Conduct focused surveys for CAGN prior to construction in suitable habitat for GAGN. Survey within 500 feet project disturbance areas.</p> <p>In occupied GAGN habitat, conduct focused nest location surveys, including 500-foot buffer around disturbance areas. Submit survey results.</p> <p>Monitor active nests weekly until nestlings fledge or nest becomes inactive.</p> <p>Establish 500-foot ground and 1,000 foot vertical buffer around active nest and demarcate buffer with fencing or flagging.</p> <p>If nest within 500 feet, prepare and implement Wildlife Noise Monitoring Plan.</p>	



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	<p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, throughout the WR-MSHCP lands (regardless of SCE’s PSE status), and is recommended within Morongo Tribal Lands. No suitable CAGN habitat is present in the CV-MSHCP portions of the ROW or on BLM land, so this mitigation measure shall not apply within those areas.</p>		
<p><b>WIL-2f:</b> Golden eagle</p>	<p><b>Conduct surveys and avoidance for golden eagle.</b> SCE shall implement the following measures to document golden eagle occurrence in the project area and surrounding mountains. Survey schedule and requirements will be as identified below unless otherwise authorized by the CPUC and BLM in consultation with the USFWS and CDFW.</p> <ul style="list-style-type: none"> <li>▪ <b>Annual Nesting Season Surveys.</b> Beginning at least one year prior to the start of construction, and continuing throughout the construction phase of the project, SCE shall contract with a qualified biologist to conduct nesting season surveys of golden eagle habitat use within a 2-mile radius of the portions of the project area where work will occur during the breeding season (December 1 through July 31). Nesting season surveys will determine occupancy, productivity, and chronology of known or newly discovered nesting territories within the 2-mile radius. Survey methods for the inventory shall be either ground-based or helicopter-based, as described in the Golden Eagle Technical Guidance (Pagel et al., 2010) or more current guidance from the USFWS.</li> <li>▪ <b>Nesting Season Inventory Data.</b> At a minimum, data collected during the nesting season surveys shall include the following: territory status (unknown, vacant, occupied, breeding successful, breeding unsuccessful); nest location, nest elevation; age class of golden eagles observed; nesting chronology; number of young at each visit; photographs; and substrate upon which nest is placed.</li> <li>▪ <b>Determination of Unoccupied Territory Status.</b> A nesting territory or inventoried habitat shall be considered unoccupied by golden eagles only after completing at least two full surveys in a single breeding season.</li> <li>▪ <b>Nest Buffer.</b> If an occupied nest (as defined by Pagel et al., 2010) is detected within 2 miles of the project, SCE shall implement a one mile line-of-sight and one-half mile no line-of-sight buffer to ensure that project construction activities do not result in injury or disturbance to golden eagles. Triggers for adaptive management shall include any evidence of project-related disturbance to nesting golden eagles, including but not limited to: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment. Adaptive management actions, include, but are not limited to, cessation of construction activities that are deemed by a qualified biologist to be the source of golden eagle disturbance.</li> <li>▪ <b>Reporting.</b> Golden eagle survey data and, if applicable, nest activity monitoring results and any adaptive management actions taken, will be provided to CPUC, BLM, CDFW, and USFWS in monthly monitoring reports, as seasonal data becomes available and if specific nest monitoring or any adaptive management actions are taken, and summarized in annual project monitoring reports.</li> </ul> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, and within the CV-MSHCP and WR-MSHCP areas (regardless of SCE’s PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>Beginning at least 1 year prior to construction and continuing throughout construction phase, conduct nesting season surveys of golden eagle habitat use within 2-mile radius of project (Season: 12/1 through 7/1).</p> <p>MM identifies minimum data collection and survey periods.</p> <p>For occupied nests within 2 miles, implement 1 mile line-of-sight and ½ mile no line-of-sight buffer.</p> <p>Report on surveys and nest activity monitoring.</p>	
<p><b>WIL-2g:</b> Burrowing owl</p>	<p><b>Conduct surveys and avoidance for burrowing owl.</b> Burrowing owl surveys shall be conducted in accordance with the most current CDFW guidelines (CDFG, 2012; or updated guidelines as they become available). SCE shall take measures to avoid impacts to any active burrowing owl burrow within or adjacent to a work area. The default buffer for a burrowing owl burrow is 300 feet for ground construction, and 300 feet horizontal and 200 feet vertical for helicopter construction. The Nesting Bird Management Plan (Mitigation Measure WIL-1c) will specify a procedure for adjusting this buffer, if needed. Binocular surveys may be substituted for protocol field surveys on private lands adjacent to the project site only when SCE has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission.</p>	<p>Prior to construction, prepare a draft Burrowing Owl Passive Relocation Plan for review and approval by CPUC/BLM. Content of Plan is described in MM.</p> <p>Conduct burrowing owl surveys.</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>If active burrowing owl burrows are located within project work areas, SCE may passively relocate the owls by preparing and implementing a Burrowing Owl Passive Relocation Plan, as described below. SCE shall prepare a draft Burrowing Owl Passive Relocation Plan for review and approval by CPUC and BLM in consultation with CDFW and USFWS prior to the start of any ground-disturbing activities. SCE may not initiate burrowing owl passive relocation prior to finalization of the Plan and approval by CPUC and BLM. No active relocation shall be permitted. No passive relocation of burrowing owls shall be permitted during breeding season, unless a qualified biologist verifies through non-invasive methods that an occupied burrow is not occupied by a mated pair, and only upon authorization by CDFW. The Plan shall include, but not be limited to, the following elements:</p> <ul style="list-style-type: none"> <li>▪ <b>Assessment of Suitable Burrow Availability.</b> The Plan shall include an inventory of existing, suitable, and unoccupied burrow sites within 300 feet of the affected project work site. Suitable burrows will include inactive desert kit fox, ground squirrel, or desert tortoise burrows that are deep enough to provide suitable burrowing owl nesting sites, as determined by a qualified biologist. If two or more suitable and unoccupied burrows are present in the area for each burrowing owl that will be passively relocated, then no replacement burrows will need to be built.</li> <li>▪ <b>Replacement Burrows.</b> For each burrowing owl that will be passively relocated, if fewer than two suitable unoccupied burrows are available within 300 feet of the affected project work site, then SCE shall construct at least two replacement burrows within 300 feet of the affected project work site. Burrow replacement sites shall be in areas of suitable habitat for burrowing owl nesting, and subject to minimal human disturbance and access. The Plan shall describe measures to ensure that burrow installation or improvements would not affect sensitive species habitat or any burrowing owls already present in the relocation area. The Plan shall provide guidelines for creation or enhancement of at least two natural or artificial burrows for each active burrow within the project disturbance area, including a discussion of timing of burrow improvements, specific location of burrow installation, and burrow design. Design of the artificial burrows shall be consistent with CDFW guidelines (CDFG, 2012; or more current guidance as it becomes available) and shall be approved by the CPUC, BLM, CDFW, and USFWS.</li> <li>▪ <b>Methods.</b> Provide detailed methods and guidance for passive relocation of burrowing owls, outside the breeding season. An occupied burrow may not be disturbed during the nesting season (generally, but not limited to, February 1 to August 31), unless a qualified biologist determines, by non-invasive methods, that it is not occupied by a mated pair. Passive relocation would include installation of one-way doors on burrow entrances that would let owls out of the burrow but would not let them back in. Once owls have been passively relocated, burrows will be carefully excavated by hand and collapsed by, or under the direct supervision, of a qualified biologist.</li> <li>▪ <b>Monitoring and Reporting.</b> Describe monitoring and management of the replacement burrow site(s), and provide a reporting plan. The objective shall be to manage the relocation area for the benefit of burrowing owls, with the specific goal of maintaining the functionality of the burrows for a minimum of two years. Monitoring reports shall be available to the CPUC and BLM on a weekly basis.</li> </ul> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, and within the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>Default buffer (may be adjusted per NBMP procedures):</p> <ul style="list-style-type: none"> <li>▪ 300 feet for ground construction</li> <li>▪ 300 feet horizontal and 200 feet vertical for helicopter construction</li> </ul> <p>If BUOW present, may passively relocate outside of nesting season after Plan is approved and if</p> <ul style="list-style-type: none"> <li>▪ qualified biologist verifies burrow not occupied by a mated pair, and</li> <li>▪ CDFW authorizes.</li> </ul>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>WIL-2h:</b> Special-status terrestrial herpetofauna</p>	<p><b>Conduct surveys and avoidance for special-status terrestrial herpetofauna.</b> This measure will not apply to desert tortoise; instead, surveys and avoidance for desert tortoise are addressed in Mitigation Measure WIL-2a. Biological monitors shall conduct clearance surveys in areas with suitable habitat for special-status terrestrial herpetofauna prior to construction each day, monitor construction activities for compliance, and submit monitoring reports to the CPUC and BLM for review on a weekly basis. Following the clearance surveys, [if special-status species or sign of special-status species are present] either (1) exclusion fencing will be erected or (2) a biological monitor will be on the site during construction activities, to prevent take of special-status herpetofauna. If the installation of exclusion fencing is deemed necessary, the biological monitor shall direct the installation of the fence.</p> <p>If any terrestrial herpetofauna are found on the construction site, the animal will be allowed to move away from the construction site on its own, or a qualified biologist will relocate it nearby suitable habitat outside the construction area and place it in the shade of a shrub. If potentially suitable burrows or rock piles are found, they will be checked for occupancy. Occupied burrows will be flagged and avoided (employing a 50-foot buffer) during construction. If the burrow cannot be avoided, it will be excavated and the occupant relocated to an unoccupied burrow outside the construction area and of approximately the same size as the one from which it was removed. If an existing burrow is unavailable, the biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, within the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>Desert tortoise are covered under MM WIL-2a.</p> <p>Conduct clearance surveys in areas with suitable habitat prior to each day of construction.</p> <p>Install exclusion fencing or monitor during construction to prevent take.</p> <p>Burrows get a 50-foot flagged buffer. If animal is relocated, must go to unoccupied burrow or to a constructed burrow.</p>	
<p><b>WIL-2i:</b> Bats</p>	<p><b>WIL-2i: Conduct surveys and avoidance for bats.</b> SCE shall conduct surveys for roosting bats within 300 feet of project activities, within 14 days prior to any grading of rocky outcrops or removal of towers or trees, particularly palm trees and large trees (12 inches in diameter or greater at 4.5 feet above grade) with loose bark or other cavities. Surveys shall be conducted during the breeding season (1 March to 31 July) and the non-breeding season. Surveys shall be performed by a qualified bat biologist (i.e., a biologist holding a CDFW collection permit and a Memorandum of Understanding with CDFW allowing the biologist to handle bats). The resume of the biologist shall be provided to the CPUC and BLM for concurrence in consultation with CDFW and USFWS prior to the biologist beginning field duties on the project. Surveys shall include a minimum of one day and one evening.</p> <p>Any active bat roosts, including occupied day roosts, maternity roosts, and hibernacula, will be identified and clearly marked. An exclusion area will be established 165 feet from any active roost, and these areas will be avoided during construction activities. If active roosts are found, then focused surveys shall be conducted to determine if the sites support special-status bat species.</p> <p>SCE shall submit documentation providing pre-construction survey results and any avoidance of roosting and nursery sites to the CPUC and BLM for review and approval.</p> <p><b>Non-special-status bats.</b> If non-breeding bat hibernacula are found in towers or trees scheduled to be removed or in crevices in rock outcrops within the grading footprint, the bats shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures must be sufficiently warm for bats to exit the roost because bats do not typically leave their roost daily during winter months in southern coastal California. This action will allow all bats to leave during the course of one week. Roosts that need to be removed, in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist, shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one night between initial disturbance and the grading or tree removal).</p>	<p>Conduct surveys for roosting bats for a minimum of one day and one evening:</p> <ul style="list-style-type: none"> <li>▪ Within 300 feet of project activities, and</li> <li>▪ Within 14 days prior to grading of outcrops or removal of towers or trees.</li> </ul> <p>Provide resume of qualified biologist to CPUC/BLM prior to beginning duties on project.</p> <p>Non-special-status bats in non-breeding state may be evicted using means approved by qualified bat biologist.</p> <p>Maternity roosts are to be avoided and not removed. If alternative roost sites are present, no action is required and the maternity roost may be demolished prior to March 1 or after young are flying, after July 31</p>	

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	<p>If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied by the roost shall be avoided (i.e., not removed) by the project. If avoidance of the maternity roost is not feasible, the bat biologist shall survey (through the use of radio telemetry or other CDFW approved methods) for nearby alternative maternity colony sites. If the bat biologist determines in consultation with and with the approval of the CDFW, BLM, and CPUC that there are alternative roost sites used by the maternity colony and young are not present, then no further action is required and it will not be necessary to provide alternate roosting habitat. However, if there are no alternative roosts sites used by the maternity colony, substitute bat roosting habitat shall be provided, as detailed below. If an active maternity roost is located in an area to be impacted by the project, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to 1 March) or after young are flying (i.e., after 31 July) using the exclusion techniques described above.</p> <p>If a maternity roost will be impacted by the project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the project site no less than three months prior to the eviction of the colony. Alternative roost sites will be constructed in accordance with the specific bats requirements in coordination with CDFW. By making the roosting habitat available prior to eviction, the colony will have a better chance of finding and using the roost. Large concrete walls (e.g., on bridges) on south or southwestern slopes that are retrofitted with slots and cavities are an example of structures that may provide alternative roosting habitat appropriate for maternity colonies. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. The CDFW shall also be notified of any hibernacula or active nurseries within the construction zone.</p> <p><b>Special-status bats.</b> If special-status bat species occur at these day roosts, maternity roosts, or hibernacula, then construction activities shall avoid these sites and a surrounding buffer distance of 300 feet. If construction activities cannot avoid these sites, construction at these sites shall be delayed until the breeding cycles for the special-status bats are completed. SCE shall consult with a bat specialist in order to determine when the breeding cycle for the special-status bats is completed. SCE shall consult with CDFW regarding eviction of non-breeding special-status bats.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, within the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>If there are no alternative roosts sites used by the maternity colony, substitute bat roosting habitat shall be provided no less than 3 months prior to eviction of the colony.</p> <p>For special-status bats day roosts and maternity roosts are to be avoided and a 300-foot buffer established. If construction cannot avoid these sites, construction shall be delayed until the breeding cycle is completed.</p>	



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<p><b>WIL-2j:</b> Special-status small mammals</p>	<p><b>Conduct surveys and avoidance for special-status small mammals.</b> SCE shall implement pre-construction surveys for special-status small mammals including San Diego black-tailed jackrabbit, northwestern San Diego pocket, pallid San Diego pocket mouse, Palm Springs pocket mouse, Los Angeles pocket mouse, Palm Springs round-tailed ground squirrel, and San Diego desert woodrat in suitable habitats. SCE shall submit documentation providing pre-construction survey results to the CPUC and BLM for review and approval in consultation with CDFW and USFWS. Prior to initiating construction-related activities, SCE shall prepare and implement construction minimization measures and habitat conservation measures for review and approval by CPUC and BLM in consultation with USFWS and CDFW to minimize habitat loss and potential take.</p> <p>Active woodrat nests that may be occupied by <i>Neotoma lepida</i> shall be flagged and ground-disturbing activities shall be avoided within a minimum of 10 feet surrounding each active nest unless otherwise authorized by the CDFW and CPUC. If avoidance is not possible, SCE shall take the following sequential steps: (1) all understory vegetation will be cleared in the area immediately surrounding active nests followed by a period of one night without further disturbance to allow woodrats to vacate the nest, (2) each occupied nest will then be disturbed by a qualified wildlife biologist until all woodrats leave the nest and seek refuge off-site, and (3) the nest sticks shall be removed from the project site and piled at the base of a nearby shrub or tree. Relocated nests shall not be spaced closer than 100 feet apart, unless a qualified wildlife biologist has determined that a specific habitat can support a higher density of nests. SCE shall document all woodrat nests moved in weekly monitoring reports, and will include a written summary in each annual report to the CPUC, BLM, and CDFW. The resumes of the qualified biologists shall be provided to the CPUC and BLM (as appropriate) for concurrence.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, within the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>Conduct pre-construction surveys for special-status small mammals.</p> <p>Submit results to CPUC/BLM.</p> <p>SCE prepare and implement construction minimization measures and habitat conservation measures for review and approval by CPUC/BLM.</p> <p>For woodrat nests, follow procedures in MM. Provide resume of qualified biologist to CPUC/BLM.</p>	
<p><b>WIL-2k:</b> American badger, ringtail, and desert kit fox</p>	<p><b>Conduct surveys and avoidance for American badger, ringtail, and desert kit fox.</b> SCE shall conduct pre-construction surveys for desert kit fox, ringtail, and American badger no more than 30 days prior to initiation of construction activities. Surveys shall be conducted in areas that contain habitat for these species and shall include project disturbance areas and access roads plus a 300-foot buffer surrounding these areas. SCE shall submit documentation providing pre-construction survey results to the CPUC and BLM for review and approval. If dens are detected, each den shall be classified as inactive, potentially active, active non-natal, or active natal.</p> <p>Inactive dens located in project disturbance areas may be excavated by hand and backfilled to prevent reuse, only upon confirmation that they are inactive.</p> <p>Active or potentially active dens shall be flagged and project activities, with exceptions as listed below, within 100 feet (non-natal dens) or 500 feet (natal dens, or any active den during the breeding season) shall be avoided. Ingress/egress of construction vehicles and equipment through buffers and low intensity activities such as inspections and BMP maintenance within buffers is allowed, provided a qualified biologist determines that these activities will not impact dens or denning animals. Buffers may be modified with concurrence of CPUC and BLM, in consultation with CDFW and USFWS. If active dens are found within project disturbance areas and avoidance is not possible, SCE shall take action as specified below, after notifying and obtaining concurrence from CPUC, BLM, and CDFW.</p> <p><b>Active and potentially active non-natal dens.</b> Outside the breeding season, any potentially active dens that would be directly impacted by construction activities shall be monitored by a qualified mammologist or biologist for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den may be excavated and backfilled by hand. If tracks are observed, the den may be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for</p>	<p>Conduct surveys no more than 30 days prior to initiation of construction in areas that contain habitat for these species. Include disturbance areas and access roads plus a 300-foot buffer.</p> <p>Classify dens as inactive, potentially active, active non-natal, or active natal.</p> <p>Treat each type of den per requirements in MM.</p> <p>Active &amp; potential active dens in non-breeding season:</p> <ul style="list-style-type: none"> <li>▪ Monitor for 3 consecutive nights. If inactive, den may be excavated and backfilled by hand</li> <li>▪ If tracks observed, progressively block with natural materials over 3 to 5</li> </ul>	

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	<p>the next three to five nights to discourage continued use. After verification that the den is no longer active, the den may be excavated and backfilled by hand.</p> <p><b>Active natal dens.</b> Active natal dens (any den with cubs or pups) or any den active during the breeding season will not be excavated or passively relocated. The cub or pup-rearing season is generally from January 15 through mid-September. A 500-foot no-disturbance buffer shall be maintained around all active natal dens. Discovery of an active natal den that could be impacted by the project shall be reported to the CPUC, BLM, and CDFW within 24 hours of the discovery along with a map of the den location and a copy of the survey results. A qualified biologist shall monitor the natal den until he or she determines that the pups have dispersed. Any disturbance to denning animals or activities that might disturb denning activities shall be prohibited within the buffer zone. Once the pups have dispersed, methods listed above for non-natal dens may be used to discourage den reuse. After verification that the den is unoccupied, it shall then be excavated by hand and backfilled to ensure that no animals are trapped in the den.</p> <p>If canine distemper is reported in desert kit fox on the site or surrounding areas, then SCE shall coordinate with CPUC, BLM, and CDFW to identify appropriate actions prior to continuing implementation of this mitigation measure in respect to desert kit fox. Any observations of a kit fox that appears sick or any kit fox mortality shall be reported to CPUC, CDFW, and BLM within one work day.</p> <p>In the event that passive relocation techniques fail, SCE shall contact the CPUC, BLM, and CDFW to explore other relocation options.</p> <p>All den monitoring and excavation activities and passive relocations shall be documented and reported to the CDFW, BLM, and CPUC in weekly monitoring reports, and a written summary will be included in each annual monitoring report.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, within the CV-MSHCP and WR-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>nights to discourage use, then excavate and backfill by hand.</p> <p>Active dens in breeding season:</p> <ul style="list-style-type: none"> <li>▪ May not be excavated or passively relocated</li> <li>▪ 500-foot no-disturbance buffer maintained around active natal dens.</li> <li>▪ Monitor until determined pups have disbursed – then may use methods for non-active dens to discourage use.</li> </ul> <p>If canine distemper is report in desert kit fox in area, coordinate with CPUC/BLM/CDFW to determine appropriate to continue implementation of measure.</p> <p>Document and report monitoring and excavation /relocation activities.</p>	
<p><b>WIL-3a:</b> Bird collision</p>	<p><b>Evaluate bird collision risk and implement APLIC design guidelines.</b> SCE shall adhere to recommendations published by APLIC (2012, <i>Reducing Avian Collisions with Power Lines: The State of the Art in 2012</i>).</p>	<p>Implement APLIC guidelines.</p>	
<p><b>Cultural Resources</b> (NOTE: <i>The Cultural APMs have been superseded by the following mitigation measures.</i>)</p>			
<p><b>CL-1a:</b> Cultural surveys to avoid sensitive areas</p>	<p><b>Avoid environmentally sensitive areas.</b> SCE shall perform focused pre-construction surveys for any project areas not yet surveyed (e.g. new or modified staging areas, pull sites, or other work areas). Resources discovered during the surveys would be subject to Mitigation Measures CL-1b (Develop Cultural Resource Management Plan [CRMP]) and CL-1d (Conduct construction monitoring). Where operationally feasible, all NRHP- and CRHR-eligible resources shall be protected from direct project impacts by project redesign (i.e., relocation of the line, ancillary facilities, or temporary facilities or work areas). In addition, all historic properties/historic resources shall be avoided by all project construction, operation and maintenance, and restoration activities. Avoidance mechanisms shall include fencing off such areas as Environmentally Sensitive Areas (ESAs) for the duration of the Proposed Project or as outlined in the CRMP.</p>	<p>SCE to perform pre-construction cultural resource surveys in areas not yet surveyed.</p> <p>Where feasible, NRHP- and CRHR-eligible resources to be protected from direct impacts. Historic properties/resources to be avoided. ESAs to be established.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>CL-1b:</b> Develop and implement a CRMP</p>	<p><b>Develop Cultural Resource Management Plan (CRMP).</b> SCE shall prepare and submit for approval a Cultural Resource Management Plan (CRMP) to guide all cultural resource management activities during project construction. Management of cultural resources shall follow the standards and guidelines established by the National Park Service for implementing Section 106 of the National Historic Preservation Act (“Archeology and Historic Preservation; Secretary of the Interior’s Standards and Guidelines,” 48 Federal Register 190 (29 September 1983), pp. 44716-44742). The CRMP shall be submitted to the CPUC and BLM for review and approval at least 60 days before the start of construction.</p> <p>The CRMP shall define and map all known NRHP- and CRHR-eligible properties in or within 100 feet of the Proposed Project APE and shall identify the cultural values that contribute to their NRHP- and CRHR-eligibility. A cultural resources protection plan shall be included that details how NRHP- and CRHR-eligible properties will be avoided and protected during construction. Measures shall include, at a minimum, designation and marking of ESAs, archaeological monitoring, personnel training, and effectiveness reporting. The plan shall detail: what measures will be used; how, when, and where they will be implemented; and how protective measures and enforcement will be coordinated with construction personnel.</p> <p>The CRMP shall also define any additional areas that are considered to be of high-sensitivity for discovery of buried NRHP- and CRHR-eligible cultural resources, including burials, cremations, or sacred features. The CRMP shall detail provisions for monitoring construction in these high-sensitivity areas. It shall also detail procedures for halting construction, making appropriate notifications to agencies, officials, and Native Americans, and assessing NRHP- and CRHR-eligibility in the event that unknown cultural resources are discovered during construction. For all unanticipated cultural resource discoveries, the CRMP shall detail the methods, the consultation procedures, and the timelines for assessing NRHP- and CRHR-eligibility, formulating a mitigation plan, and implementing treatment. Mitigation and treatment plans for unanticipated discoveries shall be reviewed by appropriate Native Americans and approved by the BLM, CPUC, and the California Office of Historic Preservation (OHP) prior to implementation.</p> <p>The CRMP shall include provisions for analysis of data in a regional context, reporting of results within one year of completion of field studies, curation of artifacts (except from private land) and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts’ data) at a facility that is approved by BLM, and dissemination of reports to local and State repositories, libraries, and interested professionals. The BLM will retain ownership of artifacts collected from BLM managed lands. SCE shall attempt to gain permission for artifacts from privately held land to be curated with the other project collections. The CRMP shall specify that archaeologists and other discipline specialists conducting the studies meet the Professional Qualifications Standards mandated by the OHP.</p>	<p>SCE to develop a CRMP, to be submitted for CPUC/BLM review and approval at least 60 days before start of construction.</p> <p>Contents of CRMP defined in MM.</p> <p>Mitigation and treatment plans for unanticipated discoveries shall be reviewed by appropriate Native Americans and approved by the BLM, CPUC, and the California Office of Historic Preservation (OHP) prior to implementation.</p> <p>The BLM will retain ownership of artifacts collected from BLM managed lands. SCE shall attempt to gain permission for artifacts from privately held land to be curated with the other project collections. The CRMP shall specify that archaeologists and other discipline specialists conducting the studies meet the Professional Qualifications Standards mandated by the OHP.</p>	
<p><b>CL-1c:</b> Train personnel regarding cultural resources</p>	<p><b>Train construction personnel.</b> Prior to the initiation of construction, all construction personnel shall be trained, by a qualified archaeologist, regarding the recognition of possible buried cultural resources (i.e., prehistoric and/or historical artifacts, objects, or features) and protection of all archaeological resources during construction. SCE shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of cultural materials. All personnel shall be instructed that unauthorized removal or collection of artifacts is a violation of State law. Any excavation contract (or contracts for other activities that may have subsurface soil impacts) shall include clauses that require construction personnel to attend the Workers’ Environmental Training Program so they are aware of the potential for inadvertently exposing buried archaeological deposits. SCE shall provide a background briefing for supervisory construction personnel describing the potential for exposing cultural resources, the location of any potential ESA and anticipated procedures to treat unexpected discoveries.</p>	<p>Prior to construction, all construction personnel to be trained regarding the recognition of possible buried cultural resources (i.e., prehistoric and/or historical artifacts, objects, or features) and protection of all archaeological resources during construction.</p> <p>Training requirements detailed in MM</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>CL-1d:</b> Conduct cultural monitoring during construction</p>	<p><b>Conduct construction monitoring.</b> Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historic and prehistoric resources that could be encountered within the Proposed Project area. Monitoring shall occur in all areas of ground-disturbing activity that occur within 100 feet of a cultural resource ESA. The qualifications of the principal archaeologist and cultural resource monitors shall be approved by the CPUC and BLM. As specified in the CRMP, intermittent monitoring may occur in areas of moderate archaeological sensitivity at the discretion of the principal archaeologist, as identified in the CRMP. Copies of monitoring reports shall be submitted to the CPUC/BLM on a weekly basis.</p> <p>A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with Native American tribes. SCE shall retain and schedule any required Native American monitors.</p>	<p>Qualified and approved archaeological monitors to monitor construction.</p> <p>Follow the CRMP and provide weekly monitoring reports.</p> <p>Use Native American monitors where specified by BLM.</p>	
<p><b>CL-2a:</b> Treatment of previously unidentified resources</p>	<p><b>Treat previously unidentified cultural resources.</b> If previously unidentified cultural resources are unearthed during construction activities, construction work in the immediate area of the find shall be halted and directed away from the discovery until a qualified archaeologist assesses the potential significance of the resource. Once the find has been inspected and a preliminary assessment made, SCE will consult with the CPUC and BLM to make the necessary plans for evaluation and treatment of the find(s).</p>	<p>When unidentified resources unearthed, cease construction until archaeologist assessed significance of resource.</p>	
<p><b>CL-2b:</b> Treatment of human remains</p>	<p><b>Properly treat human remains.</b> SCE shall follow all State and federal laws, statutes, and regulations that govern the treatment of human remains. Avoidance and protection of inadvertent discoveries which contain human remains shall be the preferred protection strategy with complete avoidance of impacts to such resources protected from direct project impacts by project redesign.</p> <p>If human remains are discovered during construction, all work shall be diverted from the area of the discovery and the BLM authorized officer and CPUC shall be informed immediately. If the remains are on federal land, the remains shall be treated in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). If the remains are not on federal land, the remains shall be treated in accordance with Health and Safety Code Section 7050.5, CEQA Section 15064.5(e), and Public Resources Code Section 5097.98. SCE shall assist and support the CPUC and BLM, as appropriate, in all required NAGPRA and Section 106 actions, government to-government and consultations with Native Americans, agencies and commissions, and consulting parties as requested by the CPUC or BLM. SCE shall comply with and implement all required actions and studies that result from such consultations.</p>	<p>Follow requirements governing treatment of human remains.</p> <p>Requires immediate notifications.</p>	
<b>Geology &amp; Soils</b>			
<p><b>G-1a:</b> Evaluate active fault zones</p>	<p><b>Conduct fault evaluation study and minimize project structures within active fault zones.</b> Prior to final Project design, SCE shall perform fault evaluation studies to confirm the location of mapped traces of active and potentially active faults crossed by the project route or other project structures, as described in Section D.9.1.2 for each project segment. For crossings of active faults, the project design shall not locate towers or other project structures on the traces of active faults; and additionally, all other project components shall be placed as far as feasible outside the areas of mapped fault traces.</p> <p>SCE shall provide CPUC and BLM a letter signed by a California registered geotechnical engineer following the completion date of all of the foundation activities for each segment. The letter will confirm that SCE followed the geotechnical report recommendations and the common engineering practice in southern California at the time of project construction.</p>	<p>Prior to final design, SCE to perform fault evaluation studies and not locate towers or other structures on traces of active faults.</p> <p>Project components to be placed as far as feasible outside areas of mapped fault traces.</p> <p>Letter from CA registered geotechnical engineer confirming SCE followed geotechnical report recommendations.</p>	



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>G-2a:</b> Evaluate for landslides and unstable slopes</p>	<p><b>Conduct geotechnical surveys for landslides and unstable slopes.</b> SCE shall conduct design-level geotechnical surveys for the project that include slope stability surveys in areas where project components are located on hills or hill tops. These surveys will acquire data that will allow identification of specific areas with the potential for unstable slopes, landslides, earth flows, and debris flows along the approved transmission line route and along other project components crossing these hills such as access and spur roads. The investigations shall include an evaluation of subsurface conditions, identification of potential landslide hazards, and provide potential modifications to the project design to avoid areas of unstable slopes and landslide hazards, such as modification of tower locations. Where the geotechnical surveys determine that landslide hazard areas cannot be avoided, best engineering design and construction measures shall be incorporated into the project designs to prevent potential damage to project facilities.</p> <p>SCE shall provide CPUC and BLM a copy of the geotechnical survey report for review, at least 60 days before construction. In addition, SCE shall submit a letter signed by a California registered geotechnical engineer following the completion date of all of the foundation activities for each segment. The letter will confirm that SCE followed the geotechnical report recommendations and the common engineering practice in southern California at the time of the project.</p>	<p>SCE to conduct design-level geotechnical surveys, including slope stability surveys, in areas with potential for unstable slopes, landslides, earth flows, and debris flows.</p> <p>SCE to provide CPUC/BLM copy of the geotechnical survey report for review at least 60 days before construction, and submit a letter signed by a California registered geotechnical engineer following the completion date of all of the foundation activities for each segment confirming that SCE followed the geotechnical report recommendations</p>	
<p><b>G-5a:</b> Foundation design</p>	<p><b>Assess soil characteristics to aid in appropriate foundation design.</b> The design-level geotechnical studies conducted for the project shall include soils analyses to identify the presence, if any, of potentially detrimental soil chemicals, such as chlorides and sulfates, and soils with moderate to high shrink/swell or expansion potential. If corrosive soils are identified, appropriate design measures for protection of reinforcement, concrete, and metal structural components against corrosion shall be utilized, such as use of corrosion-resistant materials and coatings, increased thickness of project components exposed to potentially corrosive conditions, and use of passive and/or active cathodic protection systems. If expansive soils are identified, the project design shall be modified to include appropriate design features, such as including excavation of potentially expansive or during construction and replacement with engineered backfill, ground-treatment processes, and redirection of surface water and drainage away from expansive foundation soils.</p> <p>SCE shall provide CPUC and BLM a copy of the design-level geotechnical studies for review at least 60 days before the start of construction. In addition, SCE shall submit a letter signed by a California registered geotechnical engineer following the completion date of all of the foundation activities for each segment. The letter will confirm that SCE followed the geotechnical report recommendations and the common engineering practice in southern California at the time of the project.</p>	<p>SCE to provide CPUC/BLM a copy of the design-level geotechnical studies for review at least 60 days before the start of construction</p> <p>SCE to submit a letter signed by a California registered geotechnical engineer following the completion date of all of the foundation activities for each segment confirming geotechnical report recommendations were followed.</p>	
<p><b>Hazards &amp; Hazardous Materials</b></p>			
<p><b>HH-1a:</b> Hazardous Materials and Waste Management</p>	<p><b>Prepare a Hazardous Materials and Waste Management Plan.</b> SCE shall prepare a Project-specific Hazardous Materials and Waste Management Plan. Hazardous materials used and stored on site for the proposed construction activities — as well as hazardous wastes generated onsite as a result of the proposed construction activities — shall be managed according to the specifications outlined below.</p> <ul style="list-style-type: none"> <li>▪ <b>Hazardous Materials and Hazardous Waste Handling:</b> A project-specific hazardous materials management and hazardous waste handling program shall developed prior to initiation of the project. The program will include the following components: (1) proper hazardous materials use, storage and disposal requirements as well as hazardous waste management procedures; (2) the program shall identify types of hazardous materials to be used during the project and the types of wastes that would be generated; and (3) all project personnel shall be provided with project-specific training to ensure that all hazardous materials and wastes associated with the project are handled in a safe and environmentally sound manner and disposed of according to applicable rules</li> </ul>	<p>30 days prior to initiation of the project, SCE to prepare and provide a Project-specific Hazardous Materials and Waste Management Plan.</p> <p>Specifications are provided in the MM for handling and transport of hazardous materials as well as fueling and maintenance of construction equipment and helicopters.</p>	

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	<p>and regulations. Specifically, employees handling wastes shall have or receive hazardous materials training and shall be trained in hazardous waste procedures, spill contingencies, waste minimization procedures and treatment, storage and disposal facility (TSDF) training in accordance with current OSHA Hazard Communication Standard and Title 22 CCR. SCE shall use landfill facilities that are authorized to accept the types of waste generated and hauled.</p> <ul style="list-style-type: none"> <li>▪ <b>Transport of Hazardous Materials:</b> Hazardous materials that would be transported by truck include fuel (diesel fuel and gasoline) and oil and lubricants for equipment. Containers used to stored hazardous materials would be properly labeled and kept in good condition. Written procedures for the transport of hazardous materials used would be established in accordance with U.S. Department of Transportation and Caltrans regulations. A qualified transporter would be selected to comply with U.S. Department of Transportation and Caltrans regulations.</li> <li>▪ <b>Fueling and Maintenance of Construction Equipment:</b> Written procedures for fueling and maintenance of construction equipment would be prepared prior to construction. Refueling and maintenance procedures may require vehicles and equipment to be refueled on site or by tanker trucks. Procedures will require the use of drop cloths made of plastic, drip pans and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling would be located in areas where absorbent pad and trays would be available. The fuel tanks would also contain a lined area to ensure that accidental spillage does not occur. Drip pans or other collection devices would be placed under the equipment at night to capture drips or spills. Equipment would be inspected daily for potential leakage or failures. Hazardous materials such as paints, solvents, and penetrants would be kept in an approved locker or storage cabinet.</li> <li>▪ <b>Fueling and Maintenance of Helicopters:</b> Written procedures for fueling and maintenance of helicopters would be prepared prior to construction. Procedures may require helicopters be refueled at construction work areas, helicopter staging areas, or local airports. Procedures would include the use of drop cloths made of plastic, drip pans and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling areas would be located in areas where absorbent pad and trays are available.</li> <li>▪ <b>Emergency Release Response Procedures:</b> An Emergency Response Plan detailing responses to releases of hazardous materials would be developed prior to construction activities. The plan must prescribe hazardous materials handling procedures for reducing the potential for a spill during construction, and would include an emergency response program to ensure quick and safe cleanup of accidental spills. Hazardous materials shall not be stored near drains or waterways. Fueling shall not take place within 200 feet of drains or waterways with flowing water or within 75 feet of drains or waterways that are dry. All construction personnel, including environmental monitors, would be made aware of state and federal emergency response reporting guidelines for accidental spills.</li> </ul> <p>The Plan shall be submitted to CPUC and BLM 30 days prior to the start of construction for review and approval.</p>	<p>Prior to construction, an Emergency Response Plan is to be developed .</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>HH-2a:</b> Soil management</p>	<p><b>Prepare a Soil Management Plan.</b> A Soil Management Plan shall be developed and implemented for construction of the Proposed Project. The objective of the Soil Management Plan is to provide guidance for the proper handling, onsite management, and disposal of impacted soil that might be encountered during construction activities. The plan would include practices that are consistent with the California Title 8, Occupational Safety and Health Administration (Cal-OSHA) regulations, as well as appropriate remediation standards that are protective of the planned use. Appropriately trained professionals would be on site during preparation, grading, and related earthwork activities to monitor soil conditions encountered. The Soil Management Plan would provide guidelines for the following:</p> <ul style="list-style-type: none"> <li>▪ Identifying impacted soil</li> <li>▪ Assessing impacted soil</li> <li>▪ Soil excavation</li> <li>▪ Impacted soil storage</li> <li>▪ Verification sampling</li> <li>▪ Impacted soil characterization and disposal</li> </ul> <p>The plan shall outline how Project construction crews would identify, handle, and dispose of potentially contaminated soil; identify the qualifications of the appropriately trained professionals that would monitor soil conditions and conduct soil sampling during construction; coordinate laboratory testing; and oversee disposal. The Plan shall identify the anticipated field screening methods and appropriate regulatory limits to be applied to determine proper handling and disposal. The Soil Management Plan shall also include requirements for documenting and reporting incidents of encountered contaminants, such as documenting locations of occurrence, sampling results, and reporting actions taken to dispose of contaminated materials. In the event that potentially contaminated soils were encountered within the footprint of construction, soils would be tested and stockpiled. The appropriate Certified Unified Program Agency (CUPA) or RWQCB would determine whether further assessment is warranted.</p> <p>The Soil Management Plan shall be submitted to the CPUC and BLM 30 days prior to the start of construction for review and approval. Once the Soil Management Plan is made final, a copy shall be provided as a courtesy to each jurisdiction through which the Project passes.</p>	<p>30 days prior to initiation of the project, SCE to prepare and provide a Soil Management Plan.</p> <p>Specifications for the Plan are provided in the MM.</p> <p>A courtesy copy of the plan is to be provided by SCE to each jurisdiction through which the project passes.</p>	
<p><b>HH-3a:</b> Identification of pesticide/herbicide contamination</p>	<p><b>Identify pesticide/herbicide contamination.</b> Prior to construction, soil samples shall be collected in construction areas where the land has historically or is currently being used for agriculture and would be subject to ground disturbance by the project. The sampling is to identify the possible presence of and to delineate the extent of pesticide and/or herbicide contamination. Excavated project materials containing elevated levels of pesticide or herbicide will require special handling and disposal procedures consistent with the requirements of Mitigation Measure HH-2a (Prepare a soils management plan). In the event pesticide or herbicide contamination is found, CPUC/BLM shall be notified of the event and shall be kept apprised of the steps taken to address the problem.</p>	<p>Prior to construction, soil samples to be collected in areas with historic or current agricultural use and that that will be disturbed by the project.</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Land Use</b>			
<p><b>LU-1a:</b> Construction notification plan</p>	<p><b>Prepare construction notification plan.</b> Sixty days prior to construction, SCE shall prepare and submit a Construction Notification Plan to the CPUC and BLM for approval. The Plan shall identify the procedures to ensure that SCE will inform property and business owners of the location and duration of construction, identify approvals that are needed prior to posting or publication of construction notices, and include template copies of public notices and advertisements (i.e., formatted text). The details of notification, as described below, may be modified in consultation with CPUC and BLM as warranted by circumstances. To ensure effective notification of construction activities, the plan shall address at a minimum the following components:</p> <p><b>Public notice mailer.</b> No less than 15 days prior to construction that would affect property access, a public notice mailer shall be distributed. The notice shall identify construction activities that would restrict, block, or require a detour to access existing residential properties, retail and commercial businesses, wilderness and recreation facilities, and public facilities (e.g., schools and memorial parks). The notice shall state the type of construction activities that will be conducted, and the location and duration of construction. SCE shall mail the notice to all residents or property owners within 300 feet of the right-of-way and to specific public agencies with facilities that could be impacted by construction. If construction delays of more than seven days occur, SCE shall notify residents or property owners of the delay and provide an estimated of when construction would occur.</p> <p><b>Newspaper advertisements.</b> Fifteen days prior to construction, within a route segment a newspaper advertisement shall be placed in local newspapers and bulletins of general circulation in the area. The advertisement shall state when and where construction will occur and provide information on the public liaison person and hotline identified below. If construction is delayed as noted above, an additional round of newspaper ads shall be placed to discuss the status and schedule of construction.</p> <p><b>Public venue notices.</b> Thirty days prior to construction, notice of construction shall be posted at public venues such as trail crossings, rest stops, desert centers, resource management offices (e.g., Bureau of Land Management field offices, San Bernardino National Forest Ranger Station), and other public venues to inform residents and visitors of the purpose and schedule of construction activities. For public trail closures, SCE shall post information regarding the closure and any related trail detour at applicable resource management offices and post the notice within 2 miles north and south of any such point of trail closure and detour. For recreation facilities, the notice shall be posted along the access routes to known recreational destinations that would be restricted, blocked, or detoured and shall provide information on alternative recreation areas that may be used during the closure of these facilities.</p> <p><b>Public liaison person and toll-free information hotline.</b> SCE shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. SCE shall also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls shall be addressed in the Construction Notification Plan. SCE shall provide CPUC and BLM an itemized monthly summary of complaints and inquiries received and their resolution. This shall include the name and telephone number of the caller, if provided, and the location and resolution of the complaint or inquiry.</p>	<p>60 days prior to construction, SCE to submit a Construction Notification Plan to CPUC/BLM.</p> <p>Requirements for the Plan are specified in the MM.</p>	



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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Mineral Resources</b>			
<b>MR-1a:</b> Coordinate with quarry operations  <i>MM MR-1a                      supersedes APM                      MIN-1</i>	<b>Coordinate with quarry operations.</b> Prior to construction within the Banning Rock Plant No. 66, SCE would consult with the plant owners and plant operations and management personnel. The consultation will include identification of locations of active mining and coordination of construction activities in and through those areas and to determine the best way to proceed with project construction, all with the goal of minimizing any disruption to plant operations. A plan to avoid or minimize interference with mining operations shall be prepared by SCE documenting how coordination with the quarry operators is expected to occur. Prior to construction in the quarry area, SCE shall provide CPUC and BLM a copy of this plan.	Prior to construction in the quarry area, SCE to coordinate with quarry operators and provide CPUC/BLM a copy of the plan to avoid or minimize interference with mining operations.	
<b>Noise</b>			
<b>N-1a:</b> BMPs for construction noise management	<b>Implement best management practices for construction noise.</b> SCE shall employ the following noise-control techniques, at a minimum, to reduce construction noise exposure at noise-sensitive receptors and to avoid possible violations of local rules, standards, and ordinances during construction: <ul style="list-style-type: none"> <li>▪ Construction noise shall be confined to daytime, weekday hours (7:00 a.m. to 6:00 p.m.) or an alternative schedule developed by SCE based on its coordination with the local jurisdiction.</li> <li>▪ Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.</li> <li>▪ Stationary noise sources (e.g., generators, pumps) at staging areas and on the ROW within 1,400 feet of sensitive receptors shall be shielded at the source to the extent feasible. Examples of feasible shielding include an enclosure, temporary sound walls, or acoustic blankets. For best performance, sound walls or acoustic blankets shall have a height of no less than 8 feet, a Sound Transmission Class (STC) of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutouts.</li> <li>▪ Construction traffic and helicopter flight shall be routed away from residences and schools, where feasible.</li> <li>▪ Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible, such that if a vehicle is not required for use immediately or continuously for safe construction activities, its engine should be shut off.</li> </ul>	Construction noise confined to daytime, weekday hours (7:00 a.m. to 6:00 p.m.) unless alternative schedule is based on coordination with local jurisdiction.  Noise reduction features must be as effective as original equipment.  Noise sources within 1,400 feet of sensitive receptors to be shielded at the source.  Helicopters routed away from residences and schools.  Vehicle idling to be minimized.	
<b>N-1b:</b> Helicopter noise	<b>Implement a helicopter noise control strategy.</b> As part of the final Helicopter Use Plan, SCE shall include a helicopter noise control strategy that identifies the established helicopter flight corridors and minimum transit elevations above ground level to avoid noise-sensitive receptors on the ground. The noise control strategy shall prohibit helicopter hovering (greater than 15 minutes) within 250 feet of residences in any vertical or horizontal direction.	As part of Helicopter Use Plan, flight corridors and minimum transit elevations to be identified. Hovering greater than 15 minutes within 250 feet of residences prohibited.	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Paleontological Resources</b> (NOTE: APM PAL-1 has been superseded by the following mitigation measures.)			
<p><b>PAL-1a:</b> Inventory and evaluate paleontological resources.</p>	<p><b>PAL-1a: Inventory and evaluate paleontological resources.</b> Prior to construction and all other surface-disturbing activities, the Applicant shall have conducted and submitted an inventory of significant paleontological resources within the Proposed Project area. The report shall be based on the paleontological field reconnaissance surveys (conducted by PaleoSolutions, February 2012 to April 2013).</p> <p>If any changes are made to the extent or alignment of the Proposed Project subsequent to the completed field surveys, then additional field surveys shall be conducted within new project areas. The additional field surveys shall be conducted in areas identified as having moderate, undetermined, or high paleontological resource potential. The purpose of the field survey is to visually inspect the ground surface for exposed fossils and to evaluate geologic exposures for their potential to contain preserved fossil material at the subsurface. Field surveys shall be conducted in all areas of potential ground disturbance, outside of the previously surveyed potential impact areas.</p> <p>As part of the inventory report, the paleontological sensitivity rankings of geologic units examined in the field shall be evaluated using the BLM's (2008) PFYC System and refined based on the results of the pedestrian surveys. The report shall be submitted to the CPUC and BLM for review at least 60 days before the start of construction, and shall be modified in response to agency comments, with the final report completed at least 30 days before the first ground disturbance.</p>	<p>Prior to construction and other surface-disturbing activities, SCE to inventory significant paleontological resources in project area.</p> <p>Areas not previously surveyed are to be surveyed.</p> <p>An inventory report (Paleontological Resources Report) to be provided to CPUC/BLM 60 days before construction.</p>	
<p><b>PAL-1b:</b> Paleontological Resource Mitigation and Monitoring Plan</p>	<p><b>Develop Paleontological Resource Mitigation and Monitoring Plan.</b> Following completion and approval of the Paleontological Resources Report (required in Mitigation Measure PAL-1a) and prior to the start of ground-disturbing construction, the Applicant shall prepare and submit to CPUC and BLM for review and approval, a Paleontological Resources Mitigation and Monitoring Plan (Plan), consistent with the following requirements:</p> <ul style="list-style-type: none"> <li>▪ The Plan shall be prepared by a Qualified Paleontologist and shall be based on Society of Vertebrate Paleontology (SVP) guidelines and meet all regulatory requirements. The qualified paleontologist shall have a Master's Degree or Ph.D. in paleontology, shall have knowledge of the local paleontology, and shall be familiar with paleontological procedures and techniques.</li> <li>▪ The Plan shall include a site-specific investigation to identify construction impact areas of moderate (PFYC 3a) to very high (PFYC 5) sensitivity for encountering significant resources and the approximate depths at which those resources are likely to be encountered for each component of each segment of the Proposed Project.</li> <li>▪ The Plan shall require the qualified paleontological monitor to monitor all construction-related ground disturbance in sediments determined to have a moderate (PFYC 3a) to very high (PFYC 5) sensitivity.</li> <li>▪ The Plan shall define monitoring procedures and methodology, and shall specify that sediments of undetermined sensitivity shall be monitored on a part-time basis (as determined by the Qualified Paleontologist). Sediments with very low or low sensitivity will not require paleontological monitoring.</li> <li>▪ The Plan shall state which resources will be avoided and which shall be recovered for their data potential. Where possible, recovery is preferred over avoidance in order to mitigate the potential for looting of paleontological resources. The Plan shall also detail methods of recovery, preparation and analysis of specimens, final curation of specimens at a federally accredited repository, data analysis, and reporting.</li> <li>▪ The Plan shall specify that all paleontological work undertaken by the Applicant on public lands administered by BLM shall be carried out by qualified, permitted paleontologists with the appropriate current Paleontological Resources Use Permit.</li> </ul>	<p>Following approval of a Paleontological Resources Report (see MM PAL-1a) and prior to the start of ground-disturbing construction, SCE to prepare and submit to CPUC/BLM a Paleontological Resources Mitigation and Monitoring Plan.</p> <p>The Plan specifications are listed in MM.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>PAL-1c:</b> Paleontological training of construction personnel</p>	<p><b>Train construction personnel.</b> Prior to the initiation of construction, all construction personnel shall be trained regarding the recognition of possible subsurface paleontological resources and protection of all paleontological resources during construction. The Applicant shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of paleontological materials. Training shall inform all construction personnel that Environmentally Sensitive Areas (ESAs) may include areas determined to be paleontologically sensitive. The ESAs must be avoided and travel and construction activity must be confined to designated roads and areas. All personnel shall be instructed that unauthorized collection or disturbance of protected fossils on or off the right-of-way by the Applicant, his representatives, or employees will not be allowed. Violators will be subject to prosecution under the appropriate State and federal laws and violations will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. The following issues shall be addressed in training or in preparation for construction:</p> <ul style="list-style-type: none"> <li>▪ The Applicant shall provide a background briefing for supervisory personnel describing the potential for exposing paleontological resources, the location of any potential ESAs, and procedures and notifications required in the event of discoveries by project personnel or paleontological monitors. Supervisory personnel shall enforce restrictions on collection or disturbance of fossils.</li> <li>▪ Upon discovery of paleontological resources by paleontologists or construction personnel, work in the immediate area of the find shall be halted and the Applicant's paleontologist notified. Once the find has been inspected and a preliminary assessment made, the Applicant's paleontologist will notify the BLM and CPUC and proceed with data recovery in accordance with the approved Plan consistent with Mitigation Measure PAL-1b (Develop Paleontological Resource Mitigation and Monitoring Plan).</li> </ul>	<p>Prior to construction, construction personnel to be trained on recognition and protection of possible paleontological resources.</p> <p>Topics to be addressed in training are listed in MM.</p>	
<p><b>PAL-1d:</b> Paleontology monitoring</p>	<p><b>Monitor construction for paleontological resources.</b> [Partial MM text.]</p> <p>Paleontological resource monitors per SVP (2010) shall have the equivalent of the following qualifications:</p> <ul style="list-style-type: none"> <li>▪ BS or BA degree in geology or paleontology and one year experience monitoring in the state or geologic province of the specific project. An associate degree and/or demonstrated experience showing ability to recognize fossils in a biostratigraphic context and recover vertebrate fossils in the field may be substituted for a degree. An undergraduate degree in geology or paleontology is preferable, but is less important than documented experience performing paleontological monitoring, or</li> <li>▪ AS or AA in geology, paleontology, or biology and demonstrated two years of experience collecting and salvaging fossil materials in the state or geologic province of the specific project, or</li> <li>▪ Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in the state or geologic province of the specific project.</li> <li>▪ Monitors must demonstrate proficiency in recognizing various types of fossils, in collection methods, and in other paleontological field techniques</li> </ul>	<p>SCE to submit resumes and CPUC/BLM to verify qualifications.</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Recreation</b> (NOTE: APMs REC-1 and REC-2 have been superseded by the following mitigation measures.)			
<b>R-1a:</b> Coordinate construction with recreation area representatives	<p><b>Coordinate construction schedule and activities with a representative for the recreation area.</b> No less than 30 days prior to construction that would affect recreation areas, SCE shall coordinate construction activities and the project construction schedule with a representative of the recreation areas listed below. SCE shall use best efforts to schedule construction activities to avoid heavy recreational use periods, including major holidays, in coordination with the representative. If SCE is unable to accommodate this avoidance, it will notify the CPUC and BLM as to the dates and reasons they are not able to comply. SCE shall locate construction equipment to avoid temporary preclusion of recreation area use whenever feasible per the recommendations of the representative. SCE shall also prepare a public notice of construction activities consistent with Mitigation Measure LU-1a (Prepare Construction Notification Plan). SCE shall document its coordination efforts with the representative, and provide this documentation to the CPUC and the BLM 30 days prior to construction.</p> <ul style="list-style-type: none"> <li>▪ Rancho Meditterania Park</li> <li>▪ South Hills Preserve</li> <li>▪ Lillian V. Miller Memorial Trail</li> <li>▪ Rest areas</li> <li>▪ Stetson Community Park</li> <li>▪ Noble Creek Regional Park</li> <li>▪ Trevino Community Park</li> <li>▪ Bike lane on Barton Road, Beaumont Avenue, Drainage and SCE Corridor Class I path, Cherry Avenue</li> <li>▪ Norton Younglove Preserve</li> <li>▪ San Timoteo Canyon State Park</li> <li>▪ Cherry Valley Lakes RV Campground</li> <li>▪ Oak Valley Golf Club and Park</li> <li>▪ Pacific Crest Trail</li> </ul>	<p>At least 30 days prior to construction that affects recreation areas, coordinate with representatives of the recreation areas. Provide documentation of coordination to CPUC/BLM.</p> <p>Avoid heavy use periods and major holidays, or explain reasons they cannot be avoided.</p> <p>Provide public notice of construction.</p>	
<b>R-1b:</b> Identify alternative recreation areas	<p><b>Coordinate with local agencies to identify alternative recreation areas.</b> SCE shall coordinate with the local parks and recreation departments regarding construction activities at the park and recreation facilities listed in R-1a, in order to identify alternative recreation sites that may be used by the public. SCE shall post a public notice at recreation facilities to be closed or have limited access during construction consistent with Mitigation Measure LU-1a (Prepare Construction Notification Plan) as allowed by the facility representative and identify any alternative recreation sites. SCE shall document its coordination with the parks and recreation departments and shall submit this documentation to the CPUC and the BLM 30 days prior to initiating project construction.</p>	<p>SCE to coordinate with local recreation departments to identify alternative recreation sites.</p> <p>Post a public notice of facilities to be closed or with limited access during construction. Provide documentation of coordination to CPUC/BLM</p>	
<b>R-1c:</b> Temporary detour for Pacific Crest National Scenic Trail users	<p><b>Provide a temporary detour for Pacific Crest National Scenic Trail users.</b> No less than 60 days prior to construction affecting the PCT, SCE shall coordinate with the USFS to establish a temporary detour of the trail during trail closure to avoid hazardous construction areas. SCE shall prepare a public notice of the temporary trail closure and information on the trail detour consistent with Mitigation Measure L-1a (Prepare Construction Notification Plan). SCE shall document its coordination efforts with the USFS and submit this documentation to the CPUC and the BLM 30 days prior to construction.</p>	<p>At least 60 days before construction affecting PCT, coordinate with USFS to establish temporary detour. Prepare public notice. Document to CPUC/BLM 30 days prior to construction.</p>	



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Transportation &amp; Traffic</b>			
<p><b>T-1a:</b> Construction Transportation Plan</p>	<p><b>Prepare Construction Transportation Plan.</b> Where construction traffic has the potential to significantly affect regional and local roadways by generating additional vehicle trips, SCE shall prepare a Construction Transportation Plan (CTP) describing timing of commutes, methods of reducing crew-related traffic, and other methods for reducing construction-generated additional traffic on regional and local roadways. The CTP also shall require construction workers to park personal vehicles at yards or designated assembly points and carpool to work locations in order to limit the number of construction-related vehicles on the road. At construction sites, vehicles shall be required to park within the project ROW or approved disturbance areas or on access roads to the maximum extent possible. Parking shall not be permitted in areas with dry vegetation that could pose a fire hazard. SCE shall submit the CTP to Caltrans and the affected local jurisdictions for review and approval at least 30 days prior to commencing construction activities.</p> <p>At least 15 days prior to construction, SCE shall provide a letter or email to CPUC and BLM confirming that the mitigation measure has been executed and shall provide a copy of the final CTP. This communication shall identify persons or agencies contacted, contact information, and the date of contact, and shall summarize discussions and/or agreements reached, if any.</p>	<p>SCE to prepare a Construction Transportation Plan and submit to Caltrans and affected local jurisdictions at least 30 days before construction.</p> <p>At least 15 days prior to construction, confirm to CPUC/BLM that MM has been executed and provide a copy of final CTP.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>T-1b:</b> Traffic Control Plans</p>	<p><b>Prepare Traffic Control Plans.</b> Prior to the start of construction and as part of the required traffic encroachment permits, SCE shall submit Traffic Control Plans (TCPs) to agencies with jurisdiction over the public roads that would be affected by overhead or underground construction. The measures included in the TCPs shall be consistent with the California Joint Utility Traffic Control Manual and the standard guidelines outlined in the Caltrans Traffic Manual, the Standard Specifications for Public Works Construction, the U.S. Department of Transportation’s Manual on Uniform Traffic Control Devices (MUTCD), and the Work Area Traffic Control Handbook (WATCH).</p> <p><b>Road Safety</b> TCPs shall identify:</p> <ul style="list-style-type: none"> <li>▪ the locations of all roads or traffic lanes that would need to be temporarily closed due to construction activities, including aerial hauling by helicopter and conductor stringing activities</li> <li>▪ the use of flag persons, warning signs, lights, barricades, cones, and similar means to provide safe work areas and to warn, control, protect, and expedite vehicular and pedestrian traffic</li> <li>▪ use of guard poles, netting, or similar means to protect moving traffic and structures for any construction or installation work requiring the crossing of a local street, highway, or rail line</li> <li>▪ the use of continuous traffic breaks operated by the California Highway Patrol on state highways</li> <li>▪ measures to avoid disruptions or delays in access for emergency service vehicles (such as immediately stopping work for emergency vehicle passage, short detours, and alternate routes developed in conjunction with local agencies).</li> </ul> <p><b>Emergency Services</b> Police departments, fire departments, ambulance services, and paramedic services shall be notified at least 30 days in advance by SCE of the proposed locations, nature, timing, and duration of any construction activities affecting roads and advised of any access restrictions that could impact their effectiveness. TCPs shall also include measures ensuring work crews are ready at all times to accommodate emergency vehicles, such as having the ability to immediately stop work for emergency vehicle passage and implement short detours and alternate routes developed in conjunction with local agencies. TCPs also shall identify all emergency service agencies, include contact information for those agencies, assign responsibility for notifying service providers, and specify coordination procedures.</p> <p>Copies of the TCPs shall be provided to the CPUC, BLM, Caltrans, the planning or traffic departments of the affected local jurisdictions, and all affected police departments, fire departments, and ambulance and paramedic services. Documentation of coordination with service providers shall be provided to the CPUC and BLM at least 30 days prior to the start of construction.</p>	<p>Prepare and submit Traffic Control Plans to affected jurisdictions and CPUC/BLM at least 30 days before starting construction that affects public roads.</p> <p>Minimum contents of TCPs and agencies to receive TCP are described in the MM.</p>	
<p><b>T-1c:</b> Restrict lane closures</p>	<p><b>Restrict lane closures.</b> To minimize traffic congestion and delays during construction, SCE shall restrict all necessary lane closures or obstructions on major roadways (as designated by applicable County and City General Plans) associated with overhead construction activities to off-peak traffic periods. Unless absolutely necessary, lane closures must not occur between the peak hours of 6:00 and 9:00 a.m. and 3:30 and 6:30 p.m., or as directed in writing by the affected public agency in the encroachment permit</p>	<p>Lane closures to occur during off-peak hours unless otherwise directed.</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>T-1d:</b> Disruption of bus and transit service</p>	<p><b>Minimize disruption of bus and transit service.</b> SCE shall coordinate with local and regional agencies or organizations providing regular bus or transit service in the project area at least 30 days prior to construction to reduce potential interruption of these services. At least 15 days prior to construction, SCE shall provide a letter or email to CPUC and BLM confirming that the mitigation measure has been executed. This communication shall identify persons or agencies contacted, contact information, and the date of contact, and shall summarize discussions and/or agreements reached, if any.</p>	<p>SCE to coordinate with bus/transit service providers in areas to be affected by construction at least 30 days prior, and confirm to CPUC/BLM that MM has been implemented at least 15 days prior to work.</p>	
<p><b>T-1e:</b> Pedestrian and bicycle safety</p>	<p><b>Ensure pedestrian and bicycle circulation and safety.</b> Where construction will result in temporary closures of sidewalks or other pedestrian facilities, SCE shall provide temporary pedestrian access, through detours or safe areas along the construction zone. Where construction activity will result in bike route or bike path closures, appropriate detours shall be established, and detour signs shall be posted. Detours and closures required for safe pedestrian and bicycle access through or around the construction area shall be identified in a circulation plan included in the TCP's required under Mitigation Measure T-1b. All detours and related signage shall be consistent with the standard guidelines outlined in the U.S. Department of Transportation's Manual on Uniform Traffic Control Devices (MUTCD).</p>	<p>SCE to provide temporary pedestrian and bicyclist access, along the construction zone through detours or safe areas, as identified in the TCP.</p>	
<p><b>T-1f:</b> Access to property</p>	<p><b>Provide access to property.</b> When construction activities block access to a property and the property includes a residence or business, SCE shall work with the property owner, tenant, or business owner to provide reasonable alternate access. If construction involves trenching across or in front of the property's point of access and alternative access is not available, SCE shall lay a temporary steel plate trench bridge as needed and upon request in order to ensure access when not actively constructing at the affected location.</p>	<p>SCE to provide reasonable alternative access to properties blocked by construction.</p>	
<p><b>T-3a:</b> Avoid conflicts with planned transportation improvements</p>	<p><b>Avoid conflicts with planned transportation improvements.</b> Prior to final project design, SCE shall review project plans with Caltrans and local traffic departments or public works departments of the counties and the individual cities through which the proposed transmission route would pass. The review will be conducted to identify planned transportation projects potentially affected, to ensure that Project structures are placed to avoid conflict with any planned transportation projects, and to inform the jurisdictions of the timing and location of any trenching or boring that may affect road surfaces and the flow of traffic. If there are conflicts they shall be addressed through mutual agreement of SCE and the jurisdiction.</p> <p>At least 15 days prior to construction, SCE shall provide a letter or email to CPUC and BLM confirming that the mitigation measure has been executed. This communication shall identify persons or agencies contacted, contact information, and the date of contact, and shall summarize discussions and/or agreements reached.</p>	<p>SCE to review project plans with Caltrans and traffic/public works departments.</p> <p>At least 15 days prior to construction, confirm to CPUC/BLM that MM has been executed.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>T-4a:</b> Repair road damage caused by construction activities</p>	<p><b>Repair roadways damaged by construction activities.</b> If roadways, sidewalks, medians, curbs, shoulders, or other such features are damaged by the project's construction activities, as determined by the affected public agency, such damage shall be repaired and streets restored to their pre-project condition by SCE. Prior to construction, SCE shall confer with agencies having jurisdiction over the roads anticipated to be used by delivery vehicles and equipment. Unless an alternative method for determining roadway condition is required by a given jurisdiction, at least 30 days prior to construction, SCE shall photograph or video record all construction route public roads within 500 feet in each direction of project access points (i.e., locations where vehicles leave public roads to reach project sites) and roadways where the road surface will be damaged by project-related trenching or digging, and shall provide the respective local jurisdictions, CPUC, BLM, and Caltrans (if applicable) with a copy of these images.</p> <p>At least 15 days prior to construction, SCE shall provide a letter or email to CPUC and BLM confirming that the mitigation measure has been executed. This communication shall identify persons or agencies contacted, contact information, and the date of contact, and shall summarize discussions and/or agreements reached.</p> <p>At the end of major construction, SCE shall coordinate with each affected jurisdiction to confirm what repairs would be required. Any damage shall be repaired to the pre-construction condition within 60 days from the end of all construction, or on a schedule mutually agreed to by SCE and the jurisdiction. SCE shall provide CPUC and BLM confirming documentation when the coordination has been completed and when the repairs have been completed.</p>	<p>At least 30 days prior to construction, SCE to confer with jurisdiction on roads to be use and, unless alternative method of determining existing road condition is required, photograph or video record construction route public roads within 500 feet of project access points.</p> <p>Provide affected jurisdiction, CPUC, BLM, and Caltrans copies of images.</p> <p>At least 15 days before construction, confirm to CPUC/BLM MM has coordination occurred.</p> <p>After construction, SCE to confirm toe CPUC/BLM repairs have been completed.</p>	
<p><b>T-5a:</b> Obtain need approvals from railroads</p>	<p><b>Obtain required permits or approvals for crossing or working in railroad rights-of-way.</b> SCE shall obtain permits/approvals from affected railway operators (Union Pacific Railroad and Burlington Northern Santa Fey Railway) to ensure that project construction activities in the rail ROW comply with each company's safety requirements and to avoid disruption to rail traffic. Copies of required permits or approvals shall be submitted to the CPUC and BLM prior to construction in or across rail ROWs.</p>	<p>SCE to obtain permits/approvals to work in rail ROW.</p> <p>Copies of permits/approvals to be submitted to CPUC/BLM</p>	
<p><b>T-6a:</b> Notification of temporary loss of parking</p>	<p><b>Notify public of short-term elimination of public parking spaces.</b> As required in Mitigation Measure LU-1a, prior to construction activity on major roadways, using media such as local newspapers and on-site postings, SCE shall notify the public of the potential for public parking spaces to be temporarily eliminated and identify where temporary parking spaces would be located. This requirement shall apply when more than five parking spaces are affected. The elimination of parking and location of alternative parking must be in conformance with the requirements of agencies responsible for parking management.</p>	<p>SCE to publicize where more than 5 parking spaces are affected by construction and identify alternative temp parking.</p>	
<p><b>T-7a:</b> Final Helicopter Use Plan  <i>MM T-7a supersedes APM TRANS-1</i></p>	<p><b>Prepare and implement a final helicopter use plan.</b> SCE and its contractor shall prepare and obtain approval of a Final Helicopter Use Plan prior to using helicopters to transport personnel, materials, or equipment for the deconstruction of existing project facilities or construction of new or replacement project facilities. The Final Helicopter Use Plan shall draw upon protocols and methods used on previous transmission line projects and shall be submitted to CPUC and BLM for approval.</p> <p>The Federal Aviation Agency (FAA) has jurisdiction over U.S. airspace, aircraft, aircraft operations, airports, and pilots. To the extent that they do not conflict with any FAA requirements, the following shall apply to helicopter use and be incorporated in the Final Helicopter Use Plan.</p> <ul style="list-style-type: none"> <li>▪ All aircraft and pilots shall be in full compliance with applicable FAA requirements and standards.</li> <li>▪ On the prior day, helicopter flight information shall be provided to CPUC/BLM monitors regarding the specific sites to be used for helicopter picks and the destination of the materials or assemblages being lifted out.</li> <li>▪ Daily flight notifications shall be issued by e-mail prior to commencement of any project flight activity. Information provided in the e-mail shall include pilot name, contact number, aircraft type, aircraft registration</li> </ul>	<p>At least 60 days prior to use of helicopters on the project, SCE to prepare and provide to CPUC/BLM a Final Helicopter Use Plan.</p> <p>Requirements for the plan are listed in the MM.</p> <p>Once approved, a copy of the Plan to be provided to each jurisdiction through which the project passes.</p>	



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>number, aircraft color, work/flight area, beginning time, estimated completion time, and scope of work. This information will be provided to CPUC/BLM monitors as well.</p> <ul style="list-style-type: none"> <li>▪ The specific facilities, towers, poles, and spans requiring deconstruction or construction using helicopters shall be identified.</li> <li>▪ Temporary staging of materials and assembly of tower sections outside of approved yards shall not occur without prior approval of CPUC or BLM, as appropriate.</li> <li>▪ The yards to and from which helicopters would fly (fly yards) shall be identified and shall be of sufficient size to ensure safe operations, given the other activities occurring at the yards and the vicinity.</li> <li>▪ Fly yards shall be sufficiently far from occupied residences to not create an unacceptable level of noise or dust.</li> <li>▪ The means used for dust and noise control and for safe refueling shall be specified for each fly yard.</li> <li>▪ Flight paths that minimize flights near schools, hospitals, nursing homes, and other sensitive group receptors shall be identified and followed.</li> <li>▪ Except in an emergency, helicopters shall land or hover near the ground only in areas previously approved for landing, and all dust control and biological and cultural resource protection requirements shall apply.</li> <li>▪ External loads will be secured by appropriate rigging, including boxing, netting, choking, and cabling, or other suitable means. Only qualified riggers shall prepare and attach external loads to helicopters, and rigging shall be appropriate to the nature of the load, including the use of devices as necessary to prevent materials being lost in flight. Where appropriate to reduce load in-flight spinning and movement, drag chutes will be attached to loads. The need for drag chutes will be determined by the pilot and rigging personnel, where appropriate. At locations where rigging is to occur, a sufficient supply of appropriate rigging and containment materials in good repair shall be on hand at all times.</li> <li>▪ All aircraft are to be configured with weight sensors such that, when preparing to haul external loads, the pilot is able to determine the weight of the load being lifted.</li> <li>▪ Yards or landing zones shall have a designated qualified individual managing the movement of aircraft in and out of the yard or landing zone when flight activity is high.</li> <li>▪ Appropriate protocols for communication among pilots and between pilots and the ground shall be developed and implemented.</li> <li>▪ A GPS-based data system shall be installed in each aircraft               <ul style="list-style-type: none"> <li>– The system shall identify for the pilot all project-approved project flight paths and those areas where overflights are restricted (such as seasonally restricted bird nesting areas and sensitive residential or institutional areas), and shall be updated as often as any flight restrictions are implemented or lifted.</li> <li>– The system shall automatically record and preserve flight data sufficient to identify the aircraft's flight path, including altitude above ground. The system shall be capable of providing the information required with regard to flight path and aircraft identifier, and provide a location "ping" no less frequently the once every 3 seconds. These data shall be collected daily and maintained by SCE or its contractor for a period of no less than six months and made available to CPUC or BLM upon request.</li> </ul> </li> </ul> <p>The Helicopter Use Plan shall be submitted to CPUC and BLM for review and approval at least 60 days prior to the use of helicopters on the project. Once the Helicopter Use Plan is made final, a copy shall be provided as a courtesy to each jurisdiction through which the Project passes.</p>		

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>T-8a:</b> FAA review and approval of structures and spans	<b>Obtain FAA review and approval of all structures and spans posing potential aircraft safety hazards.</b> SCE shall submit the required forms and information to FAA for its review and approval of transmission structures and conductor spans that may require installation of safety devices or other restrictions. Copies of FAA's review and approval shall be provided to CPUC and BLM at least 60 days prior to erection of structures or installation of conductors that would be in violation of FAA standards and requirements. These structures and spans shall be identified to CPUC and BLM, and the planned installation of required lighting and marker balls described.	At least 60 days prior to erection of structures or installing conductor that may require FFA review/ approval, provide CPUC/BLM copies of FAA's review/approval and describe planned installation of lights/balls.	
<b>Utilities and Public Services</b>			
<b>UPS-1a:</b> Use non-potable water for construction	<b>Use non-potable water for construction purposes.</b> Project water supply for dust control, soil compaction activities, and site restoration/revegetation shall be obtained from non-potable sources, as feasible, and ensured in a water contract through a local water agency or district. The Applicant shall provide a letter describing the availability of non-potable water and efforts made to obtain it for use during construction to the CPUC and BLM a minimum of 60 days prior to the start of construction.	At least 60 days prior to construction, describe to CPUC/BLM the availability of non-potable water and efforts to use it.	
<b>UPS-2a:</b> Protection of pipelines and overhead & underground utilities	<b>Protect pipelines and overhead and underground utilities.</b> Prior to commencing construction, SCE shall perform engineering studies to determine whether and what cathodic protection would be required on pipelines potentially affected. SCE shall submit to the CPUC and BLM written documentation of the following: <ul style="list-style-type: none"> <li>▪ Evidence of coordination with all pipeline and utility owners with facilities in the vicinity of planned construction, including their review of SCE's construction plans and a description of any protective measures or compensation to be implemented to protect affected facilities;</li> <li>▪ Copy of the Applicant's database of emergency contacts for pipelines and utilities that may be in close proximity or require monitoring during construction of the project; and</li> <li>▪ Evidence that the project meets all applicable local requirements.</li> </ul>	Prior to construction, SCE to study need for cathodic protection on pipelines.  Provide CPUC/BLM written evidence of coordination efforts, protective measure, emergency contacts, and compliance with local requirements.	
<b>Visual Resources</b>			
<b>VR-1a:</b> Screening of construction from view	<b>Screen construction activities from view.</b> Construction yards, staging areas, and material and equipment storage areas shall be visually screened using temporary screening fencing. Fencing will be of an appropriate structure, material, and color for each specific location. This requirement shall not apply if SCE can demonstrate that construction yards are located away from areas of high public visibility including public roads, residential areas, and public recreational facilities. For any site that SCE proposes to exempt from the screening requirement, SCE shall define the site on a detailed map demonstrating its visibility from nearby roads, residences, or recreational facilities to the CPUC and BLM for review and approval at least 60 days prior to the start of construction at that site.	Yards, staging areas, and storage areas to be visually screened unless SCE demonstrates they are not highly visible.  For exemptions, SCE to identify sites on maps demonstrating visibility and provide to CPUC/BLM at least 60 days prior to start of construction	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>VR-2a:</b> Minimize vegetation removal and ground disturbance	<b>Minimize vegetation removal and ground disturbance.</b> Only the minimum amount of vegetation necessary for the construction of structures and facilities shall be removed during construction. At the structure locations defined in Table D.18-11, structure and access road scars may be highly visible when located on hill slopes and along ridges, or when visible from elevated vantage points. In order to reduce visual impacts, the boundaries of all areas to be disturbed at the locations defined in Table D.18-11 shall be delineated consistent with the requirements of Biological Resources Mitigation Measure VEG-1c. Staking shall define staging areas, access roads, spur roads, tower locations, pulling sites, and sites for temporary placement of spoils. Stakes and flagging shall be installed before construction and in consultation with the Project Biologist and the CPUC/BLM Environmental Monitor or Visual Specialist. Areas staked shall be as small as possible in order to minimize the visibility of ground disturbance from sensitive viewing locations such as roads, trails, residences, and recreation facilities and areas. Parking areas and staging and disposal site locations shall be similarly located in areas approved by the Project Biologist and CPUC/BLM's Environmental Monitor or Visual Specialist prior to the start of construction. All disturbances by Proposed Project vehicles and equipment shall be confined to the staked and flagged areas.	Refer to Table D.18-11 (at end of this table) for applicable locations.  Areas are to be as small as possible and boundaries clearly delimited.	
<b>VR-3a:</b> Reduce color contrast	<b>Reduce color contrast of retaining walls, land scars, and graveled surfaces.</b> Where construction would unavoidably create land scars or retaining walls visible from sensitive public viewing locations (as defined in Table D.18-11), disturbed soils and new walls shall be treated with an appropriate color or material (Natina Concentrate, Eonite, or Permeon, or similar). The material shall be approved by the CPUC and BLM, and the intent shall be to reduce the visual contrast created by the lighter-colored disturbed soils and rock with the darker soil and vegetated surroundings. SCE shall consult with the CPUC and BLM and/or their authorized representative(s) on a site-by-site basis and obtain written approval prior to the use of any colorants.	Refer to Table D.18-11 (at end of this table) for applicable locations.  Surface color treatments to be approved by CPUC/BLM based on sit-by-site consultation.	
<b>VR-4a:</b> Views of retaining walls and land scars	<b>Minimize in-line views of retaining walls and land scars.</b> In its final Project design, SCE shall incorporate design features that reduce the in-line visibility of all access and spur roads, retaining walls, and ground disturbance areas at the locations defined in Table D.18-11. These design features include alternative access and spur road routes, the use of "drive and crush" access, and redesign and placement of retaining walls to reduce the need for new roads and retaining walls and to reduce or eliminate the in-line visibility of these facilities. SCE's final design shall document the process used to minimize visibility of the access roads or other visible road features and shall include the following: <ul style="list-style-type: none"> <li>▪ Vegetation that would be affected and steepness of terrain for consideration of vegetation and erosion impacts.</li> <li>▪ Areas where "drive and crush" access is a feasible measure to avoid access road scars (i.e., no grading or vegetation removal is required). SCE shall define frequency of driving, vehicle types to be used, and likelihood of vegetation recovery.</li> <li>▪ This documentation shall be provided to the CPUC/BLM at least 90 days prior to the start of construction.</li> </ul>	Refer to Table D.18-11 (at end of this table) for applicable locations.  At least 90 days prior to construction, provide CPUC/BLM documentation on how reduced in-line visibility of retaining walls and land scars is achieved.	
<b>VR-5a:</b> Marking of natural features	<b>Prohibit construction marking of natural features.</b> SCE shall not apply paint or permanent discoloring agents to rocks or vegetation to indicate survey or construction activity limits or for any other purpose. This measure does not apply to temporary marking agents used to identify underground utilities.	Natural features shall not be painted or discolored except for temporary marking of underground utilities	
<b>VR-7a:</b> Minimizing night lighting	<b>Minimize night lighting at project facilities.</b> SCE shall avoid night lighting where possible and minimize its use under all circumstances. To ensure this, SCE shall prepare a Night Lighting Management Plan for both construction and operation, incorporating the following general principles and specifications: <ul style="list-style-type: none"> <li>▪ Use of portable truck-mounted lighting.</li> <li>▪ Emphasis on use of low-pressure sodium (LPS) or amber light-emitting diode (LED) lighting.</li> <li>▪ White lighting (metal halide) would: a) only be used when necessitated by specific work tasks; b) would not be used for dusk-to-dawn lighting; and c) would be less than 3500 Kelvin color temperature.</li> <li>▪ All lamp locations, orientations, and intensities including security, roadway, and task lighting.</li> </ul>	SCE to prepare and provide a Night Lighting Management Plan applicable to both construction and operation of the project.  Night lighting is to be avoided or minimized.	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<ul style="list-style-type: none"> <li>▪ Each light fixture and each light shield.</li> <li>▪ Total estimated outdoor lighting footprint expressed as lumens or lumens per acre.</li> <li>▪ Detailed list of anticipated circumstances and activities that would require night lighting including the expected frequency of the activity, the duration of the activity, and the expected amount of lighting that would be necessary for that activity.</li> <li>▪ Light fixtures that could be visible from beyond project facility boundaries shall have cutoff angles sufficient to prevent lamps and reflectors from being visible beyond the project facility boundary, including security lighting.</li> <li>▪ Motion sensors and other controls to be used, especially for security lighting such that lights operate only when the area is occupied.</li> <li>▪ Surface treatment specification that will be employed to minimize glare and sky glow. The Night Lighting Management Plan shall also consider the following factors:</li> <li>▪ All temporary construction lighting and permanent exterior lighting shall include:               <ul style="list-style-type: none"> <li>(a) lamps and reflectors that are not visible from beyond the construction site or facility including any off-site security buffer areas;</li> <li>(b) lighting that shall not cause excessive reflected glare;</li> <li>(c) direct lighting that shall not illuminate the nighttime sky, except for required FAA aircraft safety lighting (which, if required, shall be an on-demand, audio-visual warning system that is triggered by radar technology);</li> <li>(d) minimization of illumination of the Proposed Project and its immediate vicinity;</li> <li>(e) creation of sky glow caused by project lighting shall be avoided;</li> <li>and (f) compliance with local policies and ordinances to be outlined in the Night Lighting Management Plan. All permanent light sources shall be below 3,500 Kelvin color temperature (warm white) and shall be full cutoff fixtures.</li> </ul> </li> <li>▪ Always-on security lighting is to be limited to one low-wattage, fully shielded, full cutoff light fixture at the main entrance to facilities. All other security lighting is to be motion activated only through the use of passive infrared sensors and controlled as specific zones such that only targeted areas are illuminated. No other lighting is to be utilized on a nightly basis when a facility is not occupied.</li> <li>▪ Lighted nighttime maintenance is to be minimized or avoided as a routine practice and should occur only during emergencies.</li> </ul> <p>The draft Night Lighting Management Plan shall be submitted to the CPUC and BLM at least 60 days prior to the start of construction. Following the BLM's and CPUC's review of the draft plan, and at least 15 days prior to the start of construction, SCE shall submit to the CPUC and BLM for review and approval, a final Night Lighting Management Plan. Construction activities shall not start until CPUC's and BLM's approvals of the plan have been received.</p>	<p>At least 60 days prior to construction, submit the draft NLMP to CPUC/BLM.</p> <p>At least 15 days prior to construction, submit final NLMP.</p> <p>Construction activities to not start until CPUC/BLM approvals of the plan have been received.</p>	



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VR-8a:</b> Minimize color contrast</p>	<p><b>Minimize visual contrast in project design.</b> In the final design of approved project structures in locations identified in the Final EIR (pages D.18-62, D.18-64) as having Class I impacts, SCE shall use design fundamentals that reduce the visual contrast of new structures and components to the characteristic landscape to the extent feasible. These include siting and location; reduction of visibility; repetition of form, line, color, and texture of the landscape; and reduction of unnecessary disturbance. SCE shall provide to the CPUC and BLM for review, a draft Project Design Plan describing the siting, placement, and other design considerations to be employed to minimize Proposed Project contrast. The plan must explain how the design will minimize visual intrusion and contrast by blending the earthwork, vegetation manipulation, and facilities with the landscape. Design strategies to address these fundamentals shall be based on the following factors.</p> <ul style="list-style-type: none"> <li>▪ <b>Earthwork.</b> Select locations and alignments that fit into the landforms to minimize the sizes of cuts and fills.</li> <li>▪ <b>Vegetation Manipulation.</b> Use existing vegetation to screen graded areas and facilities from public viewing to the extent feasible. Feather and thin the edges of cleared areas and retain a representative mix of plant species and sizes.</li> <li>▪ <b>Reclamation and Restoration.</b> Blend the disturbed areas into the characteristic landscape including access and spur roads and disturbed areas created during construction (transmission line structures, and construction yards and staging areas). Replace soil, brush, rocks, and natural debris over these disturbed areas. Newly introduced plant species shall be of a form, color, and texture that blend with the landscape.</li> </ul> <p>The Project Design Plan shall be submitted to CPUC and BLM at least 60 days prior to the start of construction. If the CPUC or BLM notifies SCE that revisions to the plan are needed before the plan can be approved, within 30 days of receiving that notification, SCE shall submit a revised plan. Once the plan is made final, SCE shall provide a copy as a courtesy to the incorporated cities and county jurisdiction where the significant visual impacts have been identified.</p>	<p>See FEIR page D.18-62, Impact VR-8. For structures identified as having Class 1 visual impacts, reduce the visual contrast with the landscape.</p> <p>At least 60 days prior to construction, provide CPUC/BLM a draft Project Design Plan describing methods to minimize contrast.</p> <p>If revisions to the plan are needed, within 30 days of notification provide a revised plan.</p> <p>Courtesy copies of final plan are to be provided to jurisdictions where significant visual impacts have been identified.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VR-9a:</b> Treatment of structure surfaces</p>	<p><b>Treat structure surfaces.</b> For locations of the project identified in the Final EIR (pages D.18-62, D.18-64) as having significant and unmitigable impacts (Class I), SCE shall treat the surfaces of all structures and new buildings visible to the public such that: a) their colors minimize visual contrast by blending with the characteristic landscape colors; and b) their colors and finishes do not create excessive glare. The transmission structures and conductors within these locations shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. SCE shall consider the use of special galvanizing treatments or post-manufacture application of chemical treatments (such as Natina Steel) to ensure that transmission structures are sufficiently dulled and non-reflective and are of the appropriate color to blend effectively with the surrounding landscape. SCE shall comply with CPUC and BLM requirements regarding appropriate surface treatments for Proposed Project elements.</p> <p>SCE shall provide to the CPUC and BLM for review, a draft Surface Treatment Plan describing the application of colors and textures to all new facility structures, buildings, walls, fences, and components comprising all facilities to be constructed within these locations. The draft Surface Treatment Plan must explain how the design will reduce glare and minimize visual intrusion and contrast by blending the facilities with the landscape. The draft plan shall be submitted to CPUC and BLM at least 60 days prior to ordering the first structures that are to be color-treated during manufacture or prior to construction of any of the facility components, whichever comes first. If the BLM or CPUC notifies SCE that revisions to the plan are needed before the plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised plan. The draft Surface Treatment Plan shall include the following components and specifications.</p> <ul style="list-style-type: none"> <li>▪ Specification, and 11" x 17" color simulations at life-size scale, of the treatment proposed for use on structures, including structures treated during manufacture.</li> <li>▪ A list of each major structure, building, tower and/or pole, and fencing specifying the color(s) and finish(es) proposed for each (colors must be identified by name and by vendor brand or a universal designation).</li> <li>▪ Two sets of brochures and/or color chips for each proposed color.</li> <li>▪ A detailed schedule for completion of the treatment.</li> <li>▪ A procedure to ensure proper treatment maintenance for the life of the Proposed Project.</li> <li>▪ Until SCE receives notification of approval of the Surface Treatment Plan by the CPUC and BLM, SCE shall not specify to the vendors the treatment of any buildings or structures for manufacture and shall not perform the final treatment on any buildings or structures treated on site. Additionally, construction activities shall not start until approval of the plan from the CPUC and BLM has been received. Within 14 days following the completion of treatment on any facility component, SCE shall notify the CPUC and BLM that the component (e.g., structure or building) is ready for inspection.</li> </ul>	<p>See FEIR page D.18-62, Impact VR-8. For structures identified as having Class 1 visual impacts, treat surface of structures to minimize color contrast and glare.</p> <p>At least 60 days prior to ordering structures to be color-treated during manufacture or to construction of any facility components, SCE to prepare and submit to CPUC/BLM a draft Surface Treatment Plan describing application of colors and textures to project elements.</p> <p>If revisions to the plan are needed, within 30 days of notification, SCE to submit revised plan.</p> <p>Until SCE receives notification of approval of the Surface Treatment Plan, SCE shall not specify to the vendors the treatment of any buildings or structures for manufacture and shall not perform the final treatment on any buildings or structures treated on site. Within 14 days following the completion of treatment on any facility component, SCE shall notify the CPUC and BLM that the component is ready for inspection.</p>	
<b>Water Resources &amp; Hydrology</b>			
<p><b>WR-2a:</b> Erosion control and water quality</p> <p><i>MM WR-2a supersedes APMs HYDRO-2 and HYDRO-3</i></p>	<p><b>Implement an Erosion Control Plan and demonstrate compliance with water quality permits.</b> SCE shall develop and submit an Erosion Control Plan to the CPUC and BLM at least 60 days prior to construction. The Erosion Control Plan may be part of the Stormwater Pollution Prevention Plan, and kept onsite and readily available on request.</p> <p>Soil disturbance at structures and access roads is to be minimized and designed to prevent long-term erosion. The Erosion Control Plan shall include:</p> <ul style="list-style-type: none"> <li>▪ The location of all soil-disturbing activities, including but not limited to new and/or improved access and spur roads.</li> </ul>	<p>At least 60 days before construction, SCE to submit to CPUC/BLM an Erosion Control Plan (which may be part of the Stormwater Pollution Prevention Plan)</p> <p>Contents of the ECP are defined in the MM.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<ul style="list-style-type: none"> <li>▪ The location of all streams and drainage structures that would be directly affected by soil-disturbing activities (such as stream crossings or public storm drains by the right-of-way and access roads).</li> <li>▪ BMPs to protect drainage structures, such as public storm drains, downstream of soil disturbance activities.</li> <li>▪ Design features to be implemented to minimize erosion during construction and during operation (if the project feature is to remain permanent after construction).</li> <li>▪ If soil cement is proposed, the specific locations must be defined in the Plan, and evidence of approval by the appropriate jurisdiction shall be submitted to the CPUC and BLM prior to its use.</li> <li>▪ If design features include the use of retaining structures and/or walls, the design of the features shall be consistent with Mitigation Measure VR-3a (Reduce color contrast of retaining walls and land scars).</li> <li>▪ The location and type of BMPs that would be installed to prevent off-site sedimentation and to protect aquatic resources.</li> <li>▪ Specifications for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design and installation details.</li> <li>▪ Proposed schedule for inspection of erosion control/SWPPP measures and schedule for corrective actions/repairs, if required. Erosion control/SWPPP inspection reports shall be provided to the CPUC EM.</li> </ul> <p>Locations requiring erosion control/SWPPP corrective actions/repairs shall be tracked, including dates of completion, and documented during inspections. Inspections and monitoring shall be performed in compliance with the Federal and California Construction General Permits. The inspection reports shall be maintained and kept in their respective SWPPP, kept on site as required by the Federal and State Construction General Permits, and made available to the RWQCB, CPUC, BLM, counties, local municipalities, and tribal governments, on request. Additionally, an Annual Report shall be filed for each reporting period in compliance with Federal and California Construction General Permit reporting requirements.</p> <p>SCE shall submit to the CPUC and BLM Grading Plans that define the locations of the specific features listed above.</p> <p>SCE shall submit to the CPUC and BLM evidence of possession of applicable required permits for the representative land disturbance prior to engaging in soil-disturbing construction/demolition activities. Such permits may include, but are not limited to, a CWA Section 402 NPDES California General Permit for Storm Water Discharges Associated with Construction Activities (General Permit) from the applicable Regional Water Quality Control Board(s) (RWQCBs), and the Federal General Permit for Storm Water Discharges Associated with Construction Activities on Tribal Land.</p> <p>Prior to ground disturbance in stream channels or other waters jurisdictional to the State of California or the Federal Government, SCE shall obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife, a Section 404 permit from the USACE, and a CWA Section 401 certification from the SWRCB.</p>	<p>Locations requiring erosion control/SWPPP corrective actions/repairs shall be tracked, including dates of completion, and documented during inspections. Inspections and monitoring shall be performed in compliance with the Federal and California Construction General Permits.</p> <p>Grading Plans shall be submitted to CPUC/BLM defining locations of features in the ECP.</p> <p>Evidence that applicable permits have been acquired to be submitted to CPUC/BLM.</p> <p>Prior to disturbance in stream channels or other jurisdictional waters, applicable permits and approvals shall be obtained.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>WR-3a:</b> Flood, erosion, and scour protection</p>	<p><b>Implement flood, erosion, and scour protection for aboveground and belowground improvements.</b> SCE shall make a determination during final project design phase as to the lateral erosion and 100-year scour potential for watercourses near proposed structures and other above-ground features, as well as new underground conduits. This determination shall be made by a registered professional engineer with expertise in river mechanics. If the determination identifies specific structures or underground conduits that may be subject to scour or lateral movement of a stream channel, these structures shall be protected against 100-year scour and/or lateral erosion through modifications of the foundation design, or otherwise in a manner determined to be appropriate by the river mechanics engineer.</p> <p>SCE shall provide the determination of lateral erosion and scour potential, and documentation of corrective actions and the engineering basis thereof, to the CPUC and BLM prior to the start of construction.</p> <p>SCE shall evaluate and conform to NPDES MS4 Phase I and II requirements for post-construction BMPs and, in consultation with San Bernardino and Riverside Counties and applicable local jurisdictions and agencies, prepare or conform to existing Water Quality Management Plans where determined necessary.</p>	<p>SCE to determine lateral erosion and 100-year scour potential for watercourses near project components. Structures subject to scour or lateral movement of a channel to be protected.</p> <p>Determinations and documentation of corrective actions and basis for actions to be provided to CPUC/BLM prior to construction.</p> <p>SCE to conform to post-construction BMPs.</p>	
<p><b>APM HYDRO-1:</b> Maintain existing flow patterns</p>	<p><b>APM HYDRO-1:</b> Installation of drainage improvements would be designed to maintain the existing flow patterns as practicable.</p>	<p>As practicable, drainage will maintain existing flow patterns.</p>	



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Wildland Fire</b>			
<b>WF-1a:</b> Fire Management Plan	<p><b>Prepare and implement a Fire Management Plan.</b> A Project-specific fire prevention plan for both construction and operation of the project shall be prepared by SCE and submitted to for review prior to initiation of construction. The draft copy of this Plan is to be provided to each fire agency at least 90 days before the start of any construction activities in areas designated as Very High or High Fire Hazard Severity Zones. Plan reviewers shall include CPUC, BLM, CAL FIRE, San Bernardino and Riverside Counties, and local municipal fire agencies with jurisdiction over areas where the project is located. Comments on the Plan shall be provided by SCE to all other participants, and SCE shall resolve each comment in consultation with CAL FIRE, BLM, and the Morongo Fire Department, as appropriate. The final Plan shall be approved by these agencies at least 30 days prior to the initiation of construction activities. SCE shall fully implement the Plan during all construction and maintenance activities.</p> <p>A project Fire Marshal or similar qualified position shall be established by SCE to enforce all provisions of the Fire Management Plan as well as perform other duties related to fire detection, prevention, and suppression for the project. SCE shall monitor construction activities to ensure implementation and effectiveness of the plan.</p> <p>The Plan shall include at a minimum SCE's Specification E-2005-104 (Transmission line Project Fire Plan), including any updates and amendments, and other requirements specified below.</p> <p>The plan should recognize and prepare for the high probability that fast moving, wind driven wildfires will burn adjacent or through the Proposed Project with some regularity as the result of severe fire weather conditions, flash fuels such as provided by perennial grasslands, and abundant ignition sources. Wind driven fires can quickly overcome operational and maintenance crews, placing their health and safety at risk.</p> <p>The Plan shall cover:</p> <ul style="list-style-type: none"> <li>▪ The purpose and applicability of the plan;</li> <li>▪ Responsibilities and duties;</li> <li>▪ Preparedness training and drills;</li> <li>▪ Procedures for fire reporting, response, and prevention that include                             <ul style="list-style-type: none"> <li>– identification of daily site-specific risk conditions</li> <li>– the tools and equipment needed on vehicles and to be on hand at sites</li> <li>– reiteration of fire prevention and safety considerations during tailboard meetings</li> <li>– daily monitoring of the red-flag warning system with appropriate restrictions on types and levels of permissible activity,</li> </ul> </li> <li>▪ Coordination procedures with BLM and San Bernardino and Riverside County fire officials.</li> <li>▪ Crew training, including fire safety practices and restrictions,</li> <li>▪ Method for verification that Plan protocols and requirements are being followed.</li> </ul>	<p>At least 90 days before the start of any construction activities in areas designated as Very High or High Fire Hazard Severity Zones, SCE to provide Fire Management Plan to CPUC/BLM, CALFIRE, Counties, and local municipal fire agencies with jurisdiction.</p> <p>Comments on Plan to be provided to CPUC/BLM.</p> <p>Final Plan to agencies to be approved at least 30 days prior to construction.</p> <p>A Fire Marshall or equivalent to be established by SCE to enforce FMP.</p>	
<b>Electrical Interference</b>			
<b>EIS-1a:</b> Conductor surface gradient	<p><b>Limit the conductor surface gradient.</b> As part of the design and construction process for the project, SCE shall limit the conductor surface gradient in accordance with the Institute of Electrical and Electronic Engineers Radio Noise Design Guide.</p>		
<b>EIS-1b:</b> Electronic interference	<p><b>Document and resolve electronic interference complaints.</b> After energizing the transmission line, SCE shall respond to, document, and resolve radio/television/electronic equipment interference complaints received. These records shall be made available to the CPUC and BLM for review upon request. All unresolved disputes shall be referred by SCE to the CPUC for resolution.</p>	<p>After energizing the line, SCE to document and resolve interference complaints.</p>	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
EIS-2a: Grounding	<b>Implement grounding measures.</b> As part of the siting and construction process, SCE shall identify objects (such as metal fences, metal buildings, and metal pipelines) within and near the right-of-way that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE's standards. The identification of objects shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.	SCE to identify metal objects that have potential for induced voltages and shall implement grounding.	

**Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a**

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
1	1W03, 1E03	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	M2-T5, M2-T5	Remove	
2	2N02	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	M39-T4	Remove	
	2N03	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	2N10	Proposed	
	M41-T1	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	2N11	Proposed	
	M41-T2	Remove	This elevated hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	2N12	Proposed	
	M41-T3	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the north and northeast.
	2N16	Proposed	
	M42-T1	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets (e.g., Prado Lane and Canyon Vista Drive) and residences to the northwest, north, and northeast.
	2N17	Proposed	
	M42-T2	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets (e.g., Prado Lane and Canyon Vista Drive) and residents to the northwest, north, east, and southeast.
	2N18	Proposed	
	M43-T3	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets (e.g., Prado Lane and Canyon Vista Drive) and residents to the northwest, north, east, and southeast.
	2N23	Proposed	
M43-T2	Remove	This elevated hillslope location would be prominently visible to travelers on nearby public streets and residents to the northwest, north, and east.	
2N29	Proposed		
M43-T6	Remove	This elevated hillslope location would be prominently visible to travelers on nearby public streets and residents to the north.	
2N32	Proposed		
M44-T3	Remove	This elevated hillslope location would be prominently visible to travelers on the adjacent public roads (I-215 and S. Mt. Vernon Ave.) and a retail complex.	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

<b>Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a</b>			
The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.			
<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
3	3S01	Modify	This elevated hillslope location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M89-T1	Remove	
	3S02	Proposed	This elevated hilltop location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M29-T2	Remove	
	M89-T2	Remove	
	3N03	Proposed	This elevated hillslope location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123273	Remove	
	3S02	Proposed	This elevated hilltop location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M29-T2	Remove	
	M89-T2	Remove	
3S03	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.	
3 (continued)	3N04	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123272	Remove	
	3S04	Modify	This elevated hilltop location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M89-T3	Remove	
	3N08, 3S08	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123270	Remove	
	M30-T1	Remove	
	M90-T1	Remove	
	3N12, 3S12	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123268	Remove	
	M30-T3	Remove	
	M90-T3	Remove	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	3N16, 3S16	Proposed	
	PP#123265	Remove	
	M31-T1	Remove	
	M91-T1	Remove	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	3N17, 3S17	Proposed	
PP#123264	Remove		
M31-T2	Remove		
M91-T2	Remove		

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

<b>Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a</b>			
The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.			
<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
	3N19, 3S19	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123263	Remove	
	3N20, 3S20	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123262	Remove	
	M31-T3	Remove	
	M91-T3	Remove	
	3N21, 3S21	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123261	Remove	
	M32-T1	Remove	
	3N22, 3S22	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	M92-T1	Remove	
	3N23, 3S23	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123260	Remove	
	M32-T2	Remove	
	M92-T2	Remove	
	3N24, 3S24	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
PP#123259	Remove		

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

<b>Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a</b>			
The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.			
<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
3 (continued)	3N25, 3S25	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123258	Remove	
	M32-T3	Remove	
	M92-T3	Remove	
	3N26, 3S26	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123257	Remove	
	3N27, 3S27	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123256	Remove	
	M33-T1	Remove	
	M93-T1	Remove	
	3N28, 3S28	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123255	Remove	
	M33-T2	Remove	
	M93-T2	Remove	
	3N29, 3S29	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123254	Remove	
	3N31, 3S31	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123253	Remove	
	M33-T3	Remove	
	3N32, 3S32	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123252	Remove	
	M33-T4	Remove	
	M93-T3	Remove	
	3N33, 3S33	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
PP#123251	Remove		
M33-T5	Remove		
M93-T4	Remove		
3N35, 3S35	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.	
PP#123250	Remove		
M34-T1	Remove		
M94-T1	Remove		



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

<b>Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a</b>			
The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.			
<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
	3N36, 3S36	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123249	Remove	
	3N37, 3S37	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123248	Remove	
	M34-T2	Remove	
	M94-T2	Remove	
3 (continued)	3N38, 3S38	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123247	Remove	
	M34-T3	Remove	
	M95-T1	Remove	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	3N39, 3S39	Proposed	
	PP#123246	Remove	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	3N40, 3S40	Proposed	
	PP#123245	Remove	
	M35-T1	Remove	
M95-T2	Remove		
4	4N02, 4S02	Proposed	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	M17-T3	Remove	
	M77-T3	Remove	
	PP#123351	Remove	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	PP#123350	Remove	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	4N03, 4S03	Proposed	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	M18-T1	Remove	
	M78-T1	Remove	
	4N50, 4S50	Proposed	This elevated location would be prominently visible to travelers on Palmer Avenue and Cherry Valley Boulevard, as well as to residents in the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	PP#123287	Remove	
	M27-T1	Remove	
	M87-T1	Remove	This ridgeline location would be prominently visible from Palmer Avenue and residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	4N51, 4S51	Proposed	
	PP#123286	Remove	

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

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The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.				
<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>	
	4N52, 4S52	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	PP#123285	Remove		
	M27-T2	Remove		
	M87-T2	Remove		
	4N53, 4S53	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	PP#123284	Remove		
	4N54, 4S54	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	PP#123283	Remove		
	M27-T3	Remove		
	M87-T3	Remove		
4 (continued)	4N55, 4S55	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	PP#123282	Remove		
	M27-T4	Remove		
	M87-T4	Remove		
	4N56	Modify	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	4S56	Proposed		
	PP#123281	Remove		
		M88-T1	Remove	
		4N57, 4S57	Proposed	This Ridgeline Location Would Be Prominently Visible From Residences And Roads Within The Tukwet Canyon Residential Development Located Immediately South And Adjacent To The Corridor.
		PP#123280	Remove	
		4N58	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
		PP#123279	Remove	
		4S58	Modify	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
		M88-T2	Remove	
		4S59	Modify	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	4S60	Proposed	This hillslope location would be visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
5	PP#123359	Remove	This ridgeline location would be visible from residences and roads within the north Banning residential neighborhoods located immediately south and adjacent to the corridor.	
	M17-T1	Remove		
	M77-T1	Remove		

**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

<b>Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a</b>			
The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.			
<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
	PP#123358	Remove	This ridgeline location would be visible from residences and roads within the north Banning residential neighborhoods located immediately south and adjacent to the corridor.
6	6N28	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M3-T2	Remove	
	M64-T1	Remove	
	6S28	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	T250	Remove	
	6S28A	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	T249	Remove	
	T248	Remove	
	6N29	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M4-T1	Remove	
M64-T2	Remove		

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The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.			
<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
6 (continued)	6S29	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T247	Remove	
	T247A	Remove	
	6N30	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M4-T2	Remove	
	M64-T3	Remove	
	6S30	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T246	Remove	
	6S30A	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T245	Remove	
	6N31	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M4-T3	Remove	
	M65-T1	Remove	
	6S31	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T244	Remove	
	6S31A	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T243	Remove	
	6N32	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M5-T1(1)	Remove	
	M65-T2	Remove	
	6S32	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T241	Remove	
	6S33	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T240	Remove	
	T239	Remove	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	6N34	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	M5-T2	Remove	
	M65-T3	Remove	
6S34	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.	
T238	Remove		
6N35	Proposed		

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The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.			
<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
	M5-T3	Remove	This ridgeline location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	M66-T1	Remove	
	6S35	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	T237	Remove	
	T236	Remove	This ridgeline location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.



**TABLE 1: PRE-CONSTRUCTION MITIGATION MEASURES AND APMs**

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<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
6 (continued)	6S36	Proposed	This elevated hillslope location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	T235	Remove	
	6N37	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	M6-T1	Remove	
	M66-T2	Remove	
	6S37	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	T234	Remove	
	T229	Remove	This location would be prominently visible from the nearby Pacific Crest Trail.
	6S41	Proposed	This location would be prominently visible from the nearby Pacific Crest Trail.
	T228	Remove	
	T228	Remove	This location would be prominently visible from the nearby Pacific Crest Trail.
	6N42	Proposed	This location would be prominently visible from the nearby Pacific Crest Trail.
	6S42	Proposed	This location would be prominently visible from the nearby Pacific Crest Trail.

## **ATTACHMENT D**

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During Construction Mitigation Measures, APMs, and BO CMs

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Agriculture</b>			
<b>AG-3a:</b> Agricultural lands coordination	<p><b>Establish agreement and coordinate construction activities with agricultural landowners.</b> [Partial MM text] ...</p> <p>The purpose of this agreement will be to set forth the use of agriculturally utilized Prime Farmland, Farmland of Statewide Importance, Unique Farmland during construction in order to: (1) schedule proposed construction activities at a location and time when damage to agricultural operations would be minimized, and (2) ensure that any areas damaged or disturbed by construction are restored to a condition mutually agreed upon by the landowner and SCE and in accordance with the existing easement language.</p> <p>SCE shall coordinate with the agricultural landowners in the affected areas where Important Farmland will be temporarily disturbed in order to determine when and where construction should occur in order to minimize damage to agricultural operations. This includes avoiding construction during peak planting, growing, and harvest seasons as feasible. If damage or destruction does occur, SCE shall perform restoration activities on the disturbed area in order to return the area to a pre-determined condition or the pre-construction condition, whichever option is agreed upon by the landowner and SCE and in accordance with the existing easement language.... Restoration activities performed by SCE will vary, depending on the language in existing or newly acquired or revised easement documents. This measure applies to landowners with agriculturally utilized land that is impacted by the Proposed Project. SCE shall provide proof of the continued use of Important Farmland currently used for agriculture through the submittal of a signed temporary construction easement or grant of easement agreement between an individual property owner and SCE.</p> <p>...</p>	SCE to comply with Agreements regarding temporary disturbance and restoration.	
<b>Air Quality</b>			
<b>AQ-1a:</b> Fugitive dust control <i>MM AQ-1a supersedes APM AIR-2</i>	<p><b>Control fugitive dust.</b> [Partial MM text]... The plan shall include the following feasible measures:</p> <ul style="list-style-type: none"> <li>▪ Traffic speeds on unpaved roads shall not exceed 15 miles per hour.</li> <li>▪ A traffic route plan shall be developed and vehicles shall follow routes that minimize unpaved road travel.</li> <li>▪ Unpaved roads, substation areas, and staging areas shall be watered three times daily when being used by construction vehicle traffic, or non-toxic soil stabilizers (e.g., water, tackifiers, and soil binders) shall be applied per manufacturer’s recommendations and in sufficient quantities to maintain compliance with SCAQMD and jurisdictional requirements to maintain no visible vehicle travel dust emissions.</li> <li>▪ Inactive excavated or graded soils and soil piles shall be sufficiently watered or sprayed with a soil stabilizer to create a surface crust or shall be covered.</li> <li>▪ Drop heights from excavators and loaders shall be minimized to a distance no more than 5 feet.</li> <li>▪ Soil truck loads shall be covered and gate seals on dump trucks shall be tight.</li> <li>▪ Construction activities that occur on unpaved surfaces shall be discontinued during periods when activities are causing visible dust plumes that cannot be avoided by approved dust suppression methods. All grading and excavation activities shall be suspended when wind speeds exceed 30 miles per hour unless otherwise approved in the Fugitive Dust Control Plan. Wind speed measurement methods shall be consistent with the SCAQMD Implementation Handbook for Rule 403 and Rule 403.1.</li> </ul>	SCE to Implement approved Fugitive Dust Control Plan	
<b>APM AIR-1:</b> Exhaust Emissions Control Plan	<p><b>Prepare Exhaust Emissions Control Plan.</b></p>	SCE to implement approved Exhaust Emissions Control Plan	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>AQ-1b:</b> Off-road emissions <i>MM AQ-1b supplements APM AIR-1</i></p>	<p><b>AQ-1b: Control off-road equipment emissions.</b> Off-road equipment with engines larger than 50 horsepower shall have engines that meet or exceed U.S. EPA/CARB Tier 3 Emissions Standards. Exceptions will be allowed only on a case by case basis for two specific situations: (1) an off-road equipment item that is a specialty, or unique, piece of equipment that cannot be found with a Tier 3 or better engine after a due diligence search; and/or (2) an off-road equipment item that will be used for a total of no more than 10 days.</p>	<p>Comply with off-road equipment engine standards.</p>	
<p><b>AQ-1c:</b> Control helicopter emissions</p>	<p><b>Control helicopter emissions.</b> Helicopter emissions shall be reduced by the following methods and measures:</p> <ul style="list-style-type: none"> <li>▪ Helicopter idling will occur only when necessary for safe operation and emergency readiness purposes.</li> <li>▪ Helicopter operators shall use the smallest practical and available helicopter for each lift operation.</li> <li>▪ Fugitive dust from helicopter rotor wash will be reduced through the implementation of the following measures: <ul style="list-style-type: none"> <li>– The helicopter staging areas, that are not on existing paved airfields or other large paved sites, shall be treated with soil amendments (e.g., water, tackifiers, soil binders) that shall be applied at a frequency necessary to create and maintain surface soil crusts where rotor wash creates fugitive dust emissions;</li> <li>– Enough land area shall be obtained for each helicopter staging area not located on existing paved airfields or other large paved sites, so that rotor wash does not create visible fugitive dust emissions outside of the controlled staging area or ROW.</li> <li>– Helicopter operations will take flight paths (i.e. elevation above ground) that will eliminate dust emissions from rotor wash when travelling between the helicopter staging area and the work sites.</li> <li>– The helicopter work sites shall be watered prior to helicopter visits. Alternatively, other soil stabilizers shall be applied at a frequency necessary to create and maintain a surface soil crust while helicopter visits are occurring at the work site.</li> </ul> </li> </ul>	<p>Confirm SCE following MM requirements.</p>	
<p><b>Biological Resources – Vegetation (NOTE: The BIO Vegetation APMs have been superseded by the following mitigation measures.)</b></p>			
<p><b>VEG-1a:</b> Biological monitoring and reporting</p>	<p><b>Conduct biological monitoring and reporting.</b> [Partial MM text] The following provisions shall apply to the approved project during the construction and post-construction restoration phases.</p> <p><b>Lead biologist:</b> ...The lead biologist will be SCE’s primary point of contact to CPUC, BLM, CDFW, and USFWS regarding any biological resources issues and implementation of related mitigation measures and permit conditions throughout project construction and post-construction restoration work. In addition, the lead biologist will oversee supervision and training of biological monitors (below) and preparation and submission of all monitoring reports and notifications (below).</p> <p>If the lead biologist is replaced, the specified information of the proposed replacement must be submitted to the CPUC and BLM at least ten working days prior to the termination or release of the preceding lead biologist. In an emergency, SCE shall immediately notify the CPUC and BLM to discuss the qualifications and approval of a short-term replacement while a permanent lead biologist is proposed for consideration.</p> <p><b>Biological monitors:</b> SCE shall assign qualified biological monitors to the project to monitor all work activities during the construction phase.</p> <p>Monitors are responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, and sensitive or unique biological resources are avoided or minimized to the fullest extent safely possible. Monitors are also responsible to ensure that work activities are conducted in compliance with APMs, mitigation measures, permit conditions, and other project requirements.</p> <p>Resumes of all biological monitors, including specialty monitors (including but not limited to bat, nesting bird, and special-status species monitors), shall be provided for concurrence by the CPUC and BLM, at least 10 working days prior to the monitor commencing field duties. The resumes shall demonstrate, to the satisfaction of the</p>	<p>Ensure SCE complies with biological monitoring and reporting requirements and protocols.</p> <p>Biological monitor resumes to be provided 10+ days prior to commencing field duties.</p> <p>Training of all biologicals monitors, including WEAP</p> <p>Biological monitors (or construction supervisors) to inform construction crew daily of ESAs, buffers, other resource issues/restrictions. This information to be provided to CPUC monitors as well.</p> <p>Number of monitors shall be adequate for duties assigned.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>CPUC and BLM, the appropriate education and experience to accomplish the assigned biological resources tasks.</p> <p>SCE shall provide training to biological monitors, in addition to WEAP (see Mitigation Measure VEG-1b) and prior to the monitor commencing field duties, on biological resources present or potentially present on the Proposed Project, as well as mitigation measures, permit requirements, project protocols, and the duties and responsibilities of a biological monitor.</p> <p>Biological monitors shall inform construction crews daily of any environmentally sensitive areas (ESAs), nest buffers, or other resource issues or restrictions that affect the work sites for that day. Biological monitors shall communicate with construction supervisors and crews as needed (e.g., at daily tailgate safety meetings (“tailboards”), by telephone, text message, or email) to provide guidance to maintain compliance with mitigation measures and permit conditions. SCE shall ensure that adequate numbers of monitors are assigned to effectively monitor work activities and that communications from biological monitors are promptly directed to crews at each work site for incorporation into daily work activities. If biological monitors are unavailable for a tailboard meeting, the construction supervisors shall communicate all ESA, nest buffers, or other resource restrictions to crews during the meeting. SCE shall ensure that biological monitors are provided with an accurate daily construction work schedule as well as updated information on any alterations to the daily construction work schedule. This information shall also be provided to CPUC monitors. SCE shall ensure that biological monitors are provided with up-to-date biological resource maps and construction maps in hardcopy or digital format. These maps shall also be provided to CPUC monitors.</p> <p>Monitors shall be familiar with the biological resources present or potentially present, ESAs, nest buffers, and any other resource issues at the site(s) they are monitoring, as well as the applicable mitigation measures and permit requirements. Monitors shall exhibit diligence in their monitoring duties and refrain from any conduct or potential conflict of interest that may compromise their ability to effectively carry out their monitoring duties.</p> <p><b>Biological monitor duties and responsibilities:</b> Throughout the duration of construction, SCE shall conduct biological monitoring of all activities in any area where there is a potential to impact sensitive biological resources or jurisdictional waters, including but not limited to vegetation removal/trimming/disturbance, all ground-disturbing work activities, and initial “drive and crush” in the project area, including work sites, yards, staging areas, access roads, and any area subject to project disturbance. Pre-construction activities (e.g., for geotechnical borings, hazardous waste evaluations, etc.) and post-construction restoration shall also be monitored by a biological monitor during all such activities.</p> <p>Each day, prior to work activities at each site, a biological monitor shall conduct clearance surveys (“sweeps”) for sensitive plant or wildlife resources that may be located within or adjacent to the construction areas. If sensitive resources are found, the biological monitor shall take appropriate action as defined in all adopted mitigation measures, APMs, and permit conditions. Work activities shall not commence at any work site until the clearance survey has been completed and the biological monitor communicates to the contractor that work may begin.</p> <p>Biological monitors shall clearly mark sensitive biological resource areas with staking, flagging, or other appropriate materials that are readily visible and durable. The monitors will inform work crews of these areas and the requirements for avoidance, and will inspect these areas at appropriate intervals for compliance with regulatory terms and conditions. The biological monitors shall ensure that work activities are contained within approved disturbance area boundaries at all times.</p> <p>Biological monitors shall have the authority and responsibility to halt any project activities that are not in compliance with applicable mitigation measures, APMs, permit conditions, or other project requirements, or will have an unauthorized adverse effect on biological resources.</p>	<p>Sensitive resources shall be flagged or marked.</p> <p>Any project area with potential sensitive biological resources or jurisdictional waters is to be monitored.</p> <p>Daily prior to work, clearance surveys (sweeps) shall occur.</p> <p>Interactions with wildlife shall be performed consistent with MMs, permits, etc.</p> <p>Biological monitors shall inspect construction areas and equipment for trapped animals and birds.</p> <p>At end of each workday, biological monitors to verify excavations, tanks, and trenches have been covered or ramps are installed.</p> <p>Wildlife exclusion fencing to be inspected regularly and any repairs made within one day.</p> <p>SCE to establish communications procedures for biological monitors and construction crews.</p> <p>SCE to notify CPUC/BLM of procedure and maintain records of daily communication.</p> <p>Monitoring activities to be documented and reported daily, weekly, annually, and in final monitoring report. Contents of reports specified in MM</p> <p>SCE to provide report formats, content, and organization for CPUC/BLM review and approval.</p>	



**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>Handling, relocation, release from entrapment, or other interaction with wildlife shall be performed consistent with mitigation measures, safety protocols, permits (including CDFW and USFWS permits), and other project requirements.</p> <p>Biological monitors shall, to the extent safe, practicable, and consistent with mitigation measures and permit conditions, actively or passively relocate wildlife out of harm's way. On a daily basis, biological monitors shall inspect construction areas where animals may have become trapped, including equipment covered with bird exclusion netting, and release any trapped animals. Daily inspections shall also include areas with high vehicle activity (e.g., yards, staging areas), to locate animals in harm's way and relocate them if necessary. If safety or other considerations prevent biological monitors from aiding trapped wildlife or wildlife in harm's way, SCE shall consult with the construction contractor, CDFW, wildlife rehabilitator, or other appropriate party to obtain aid for the animal, consistent with Mitigation Measure WIL-1b (Ensure wildlife impact avoidance and minimization) (See Section D.5.3.3 (Biological Resources – Wildlife, Impacts and Mitigation Measures) for full text).</p> <p>At the end of each work day, biological monitors shall verify that excavations, open tanks, and trenches have been covered or have ramps installed to prevent wildlife entrapment and communicate with work crews to ensure these structures are installed and functioning properly.</p> <p>Biological monitors shall regularly inspect any wildlife exclusion fencing daily to ensure that it remains intact and functional. Any need for repairs to exclusion fencing shall be immediately communicated to the responsible party, and repairs shall be carried out in a timely manner, generally within one work day.</p>		
	<p><b>Reporting:</b> SCE shall prepare and implement a procedure for communication among biological monitors and construction crews, to ensure timely notification (i.e., daily or sooner, as needed) to crews of any resource issues or restrictions. SCE will notify the CPUC and BLM of the procedure and will maintain records of daily communication. SCE will provide CPUC and BLM on-line access to project resource management maps and GIS data.</p> <p>Monitoring activities shall be thoroughly and accurately documented on a daily basis. SCE shall prepare and submit daily, weekly, annual, and final monitoring reports to the CPUC and BLM. Prior to the start of monitoring activities, SCE shall provide proposed report formats, describing content and organization, for CPUC and BLM review and approval in consultation with CDFW and USFWS. Report contents shall be as follows:</p> <ul style="list-style-type: none"> <li>▪ <b>Daily reports:</b> <ul style="list-style-type: none"> <li>– All daily special status species observations, including location of observation, location and description of project activities in the vicinity, and any avoidance or other measures taken to avoid the species. In addition, all special-status species observations shall be reported to the CNDDDB (California Natural Diversity Database; see Weekly reports).</li> <li>– All non-compliance incident reports, including nest buffer incursions (see Mitigation Measure WIL-1c (Prepare and implement a Nesting Bird Management Plan)).</li> <li>– Daily project activity plans, specifying each work site.</li> </ul> </li> </ul> <p>Weekly reports:</p> <ul style="list-style-type: none"> <li>– Copies of all CNDDDB records for the preceding week, and any additional reporting information for each species report (see Mitigation Measures WIL-2a through WIL-2k).</li> <li>– Weekly update of bird nesting activities and buffer distances (see Mitigation Measure WIL-1c).</li> </ul> <ul style="list-style-type: none"> <li>▪ <b>Annual reports:</b> SCE shall submit an annual monitoring report by January 30 of each calendar year, with the following contents: <ul style="list-style-type: none"> <li>– A summary of all compliance monitoring reports submitted throughout the calendar year;</li> </ul> </li> </ul>		

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<ul style="list-style-type: none"> <li>- A summary of all non-compliance records occurring during the calendar year, and remedial actions applied for each one, with additional explanatory text and explanation of resolution of each substantial non-compliance incident (often termed "Level 3 non-compliance");</li> <li>- A summary of all nest buffer incursions, including helicopter incursions, (see Mitigation Measure WIL-1c), with explanation of follow-up actions and resolution for each one;</li> <li>- Running annual compilations of permanent and temporary impact acreages by habitat and land use jurisdiction;</li> <li>- Summaries of all other monitoring reporting requirements, as specified in mitigation measures in the Vegetation and Wildlife Resources sections; and</li> <li>- Discussion of "lessons learned" during the calendar year, and recommended or proposed measures to improve compliance throughout the remainder of the project.</li> </ul> <p>▪ <b>Final report:</b> After construction has been completed, a final environmental compliance monitoring report shall be submitted to the CPUC and BLM for review and approval. This report shall be submitted within twelve (12) months of the completion of construction and shall include:</p> <ul style="list-style-type: none"> <li>- A summary of all non-compliance records occurring during the construction phase, and remedial actions applied for each one, with additional explanatory text and explanation of resolution of each substantial non-compliance incident (often termed "Level 3 non-compliance");</li> <li>- A summary of all nest buffer incursions, including helicopter incursions, (see Mitigation Measure WIL-1c) occurring during the construction phase, with explanation of follow-up actions and resolution for each one;</li> <li>- Final compilations of permanent and temporary impact acreages by habitat and land use jurisdiction;</li> <li>- Summaries of all other monitoring reporting requirements, as specified in mitigation measures in the Vegetation and Wildlife Resources sections; and</li> <li>- Discussion of "lessons learned" during construction, and recommended or proposed measures to improve compliance for future projects.</li> </ul> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE's PSE [Participating Special Entity] status); CV-MSHCP (within the CV-MSHCP regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>		
<p><b>VEG-1b:</b> Worker Environmental Awareness Program</p>	<p><b>Prepare and implement a Worker Environmental Awareness Program (WEAP).</b> SCE shall prepare and implement a project-specific Worker Environmental Awareness Program (WEAP) to educate on-site workers about the Proposed Project's sensitive environmental issues. The WEAP shall be administered by the lead biologist or a biological monitor to all personnel on-site during the construction phase, including but not limited to surveyors, engineers, inspectors, contractors, subcontractors, supervisors, employees, monitors, visitors, and delivery drivers. If the WEAP presentation is recorded on video, it may be administered by any competent project personnel. Throughout the duration of construction, SCE shall be responsible for ensuring that all on-site project personnel receive this training prior to beginning work. A construction worker may work in the field along with a WEAP-trained crew for up to 5 days prior to attending the WEAP. SCE shall maintain a list of all personnel who have completed the WEAP training. This list shall be provided to the CPUC and BLM upon request.</p> <p>The WEAP shall consist of a training presentation, with supporting written materials provided to all participants.</p> <p>....</p> <p>The WEAP training shall include, at minimum:</p> <ul style="list-style-type: none"> <li>▪ Overview of the project, the jurisdictions the project route passes through (e.g., BLM, reservation, WR-MSHCP, CV-MSHCP) and any special requirements of those jurisdictions.</li> </ul>	<p>SCE to administer approved WEAP.</p> <p>WEAP training to occur as specified in MM and WEAP.</p> <p>WEAP-lite for drivers and visitors. Not required for visitors fewer than 5 days per year and accompanied by WEAP-trained personnel.</p> <p>WEAP refreshers to be provided at least once per week at tailboards.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<ul style="list-style-type: none"> <li>▪ Overview of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and the consequences of non-compliance with these acts.</li> <li>▪ Overview of the project mitigation and biological permit requirements, and the consequences of non-compliance with these requirements.</li> <li>▪ Sensitive biological resources on the project site and adjacent areas, including nesting birds, special-status plants and wildlife and sensitive habitats known or likely to occur on the project site, project requirements for protecting these resources, and the consequences of non-compliance.</li> <li>▪ Construction restrictions such as limited operating periods, ESAs, and buffers.</li> <li>▪ Avoidance of invasive weed introductions onto the project site and surrounding areas, and description of the project's weed control plan and associated compliance requirements for workers on the site.</li> <li>▪ Function, responsibilities, and authority of biological and environmental monitors and how they interact with construction crews.</li> <li>▪ Requirement to remain within authorized work areas and on approved roads, with examples of the flagging and signage used to designate these areas and roads, and the consequences of non-compliance.</li> <li>▪ Procedure for obtaining clearance from a biological monitor to enter a work site and begin work (including moving equipment), and the requirement to wait for that clearance.</li> <li>▪ One-hour hold (or other method SCE will use to halt work when necessary to maintain compliance) and the requirement for compliance.</li> <li>▪ ESAs and associated restrictions, and other restrictions such as no grading areas, flagging or signage designations, and consequences of non-compliance.</li> <li>▪ Nest buffers and associated restrictions and the consequences of non-compliance. Procedure and time frame for halting work and removing equipment when a new buffer is established. Discussion of nest deterrents.</li> <li>▪ Explanation that wildlife must not be harmed or harassed. Procedures for covering pipes, securing excavations, and installing ramps to prevent wildlife entrapment. What to do and who to contact if dead, injured, or entrapped animals are encountered (see Mitigation Measure WIL-5b).</li> <li>▪ General safety protocols such as hazardous substance spill prevention, containment, and cleanup measures; fire prevention and protection measures; designated smoking areas (if any) and cigarette disposal; safety hazards that may be caused by plants and animals; and procedure for dealing with rattlesnakes in or near work areas or access roads (see Mitigation Measure WIL-5b).</li> <li>▪ Project requirements that have resulted in repeated compliance issues on other recent transmission line projects, such as dust control, speed limits, track out (dirt or mud tracked from access roads or work sites onto paved public roads or other areas), personal protective equipment (PPE), work hours, working prior to clearance, and waste containment and disposal.</li> <li>▪ Printed training materials, including photographs and brief descriptions of all special-status plants and animals that may be encountered on the project, including behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures.</li> <li>▪ Contact information for SCE, construction management, and contractor environmental personnel, and who to contact with questions.</li> <li>▪ Training acknowledgment form to be signed by each worker indicating that they understand and will abide by the guidelines, and a hardhat sticker so WEAP attendance may be easily verified in the field.</li> </ul>	<p>For contractors or subs not substantially working for 6 consecutive calendar days, extended WEAP refreshed to occur at tailboard on first day back to work.</p> <p>Date, contractor or sub, tailboard location/time, and topic(s) in WEAP refresher to be included in monitor's daily report.</p>	

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	<p><b>WEAP Lite.</b> An abbreviated version of WEAP training (“WEAP lite”) may be used for individuals who are exclusively delivery drivers, concrete truck drivers, or visitors to the project site, and will be provided by a qualified project biologist, biological monitor, or environmental field staff prior to those individuals entering or working on the project.</p> <p>Short-term visitors (total of 5 days or less per year) to the project site who will be riding with and in the company of WEAP-trained project personnel for the entire duration of their visit(s) are not required to attend WEAP or WEAP lite training.</p> <p>WEAP lite training will provide sufficient information for the individual to understand and maintain compliance with project mitigation measures and permit conditions. WEAP lite presentations will be tailored to the situation and emphasize project requirements that are relevant to that situation (e.g., dust control, speed limits, staying within project roads and work areas, and use of washouts for concrete truck drivers).</p> <p>A training acknowledgment form will be signed by each participant indicating that they understand and will abide by the guidelines, and a hardhat sticker so WEAP lite attendance may be easily verified in the field. SCE will maintain a list of personnel who have completed WEAP lite training. This list will be provided to the CPUC and BLM upon request.</p> <p><b>WEAP Refreshers.</b> Biological monitors or environmental field staff will periodically present brief WEAP refresher presentations at tailboards to help construction crews and other personnel maintain awareness of environmental sensitivities and requirements. A 5- to 10-minute informal talk will be presented at each of the project’s main contractor/subcontractor tailboards at least once a week.</p> <p>When a contractor or subcontractor resumes work after a long break (more than six (6) consecutive calendar days with no substantial work on project construction in the field), a biological monitor or environmental field staff will provide an extended WEAP refresher presentation (10-20 minutes) at each of the contractor/subcontractor tailboards on the first day back to work.</p> <p>The monitor will note the date, contractor or subcontractor, tailboard location and time, and topic(s) discussed during the WEAP refresher and include this information in their daily monitoring report.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE’s PSE status); CV-MSHCP (within the CV-MSHCP regardless of SCE’s PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>		

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<p><b>VEG-1c:</b> Minimize native vegetation and habitat loss.</p>	<p><b>Minimize native vegetation and habitat loss.</b> Final engineering of the project shall minimize the extent of disturbance and removal of native vegetation and habitat, to the extent safe and feasible. Wherever feasible, work activities and roadways will avoid or minimize direct or indirect effects to sensitive habitat types or jurisdictional waters and provide buffer areas to minimize disturbance. Wherever feasible, project access will utilize existing routes or bridges over jurisdictional waters.</p> <p>As feasible, and consistent with project safety and security protocols, landowner preferences, and any other applicable regulations or requirements, existing gates on project access roads will be closed and secured when project personnel enter or leave an area.</p> <p>... All project disturbance areas within mapped grassland/forbland will be further categorized as either suitable or not suitable as Stephens' kangaroo rat habitat, and the relative cover of native perennial grasses shall be quantified (see VEG-1d, Part B).</p> <p>...</p> <p>To the extent feasible, vegetation removal within work areas will be minimized and construction activities will implement drive and crush access and site preparation rather than grading. To the extent feasible, stockpiling of spoils and salvaged topsoil will be located in previously disturbed areas, and will avoid native vegetation.</p> <p>Prior to any construction, equipment or crew mobilization at each work site, work areas will be marked with staking or flagging to identify the limits of work and will be verified by project environmental staff and CPUC Environmental Monitor. Staking and flagging will clearly indicate the work area boundaries. Where staking cannot be used, traffic cones, traffic delineators, or other markers will be used. Staking and flagging or other markers will be in place during construction activities at each work site and will be refreshed as needed. Coded flagging colors or color combinations will be consistent and uniform across the project. All work activities, vehicles, and equipment will be confined to approved roads and staked and flagged or marked work areas.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE's PSE status); CV-MSHCP (within the CV-MSHCP regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>Use existing access were feasible.</p> <p>Buffer sensitive areas to minimize disturbance.</p> <p>Limits of work areas will be staked/flagged prior to any work.</p> <p>Secure existing gates on access roads.</p> <p>Use drive and crush access and site preparation were feasible and stockpile in previously disturbed areas.</p> <p>All work activities, vehicles, and equipment confined to approved roads and marked work areas.</p>	
<p><b>VEG-1d:</b> Restoration of temporary disturbance areas</p>	<p><b>Restore or revegetate temporary disturbance areas</b> This measure has two parts: Part A and Part B. Part A is applicable to all temporary disturbance areas, and Part B is applicable to disturbance occurring in sensitive vegetation types and special-status species habitats.</p> <p>...</p>	<p>SCE to implement Habitat Restoration and Revegetation Plan (HRRP).</p> <p>See also MM VEG-4a: Minimize and mitigate impacts to special-status plants</p> <p>Annual reporting required for restoration and revegetation efforts. Monitoring of the reclamation, revegetation, or restoration sites will continue annually for no fewer than five (5) years or until the defined success criteria are achieved.</p>	
	<p><b>Part A: Habitat restoration and revegetation for all temporary disturbance areas.</b></p> <p>SCE shall prepare and implement a Habitat Restoration and Revegetation Plan (HRRP), to restore or revegetate all temporary disturbance areas, including temporary disturbance areas around tower construction sites, laydown or staging areas, temporary access and spur roads, cut and fill slopes, and locations of existing towers that are</p>		



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	<p>removed during construction of the project. For temporary disturbances in agriculture, developed/disturbed, and most grassland/forbland (excluding suitable Stephens' kangaroo rat habitat and any areas with 10 percent or greater relative cover of native perennial grass species), and for temporary disturbance areas that cannot be effectively revegetated and are therefore subject to off-site compensation (Mitigation Measure VEG-1e), the overall goals of the HRRP will be to minimize weed invasion, dust generation, and soil erosion. The goals for sensitive vegetation and special-status species habitat are described in Part B of this Mitigation Measure.</p> <p>...</p> <p>For all temporary disturbance areas, the HRRP shall include the following elements:</p> <ul style="list-style-type: none"> <li>▪ A statement of revegetation goals and objectives for each portion of the project area, based on vegetation type and jurisdictional status of each site.</li> <li>▪ Quantitative success criteria for each revegetation or restoration site or category.</li> <li>▪ Implementation details, including but not limited to topsoil stockpiling and handling; post-construction site preparation; soil decompaction and recontouring; planting and seeding palettes to include only native, locally sourced materials with confirmed availability from suppliers; fall-season planting or seeding dates.</li> <li>▪ Maintenance, including but not limited to irrigation or hand-watering schedule and equipment, erosion control, and weed control.</li> <li>▪ Monitoring and Reporting, specifying monitoring schedule and data collection methods throughout establishment of vegetation with key indicators of successful or unsuccessful progress, and quantitative values to objectively determine success or failure at the conclusion of the monitoring period.</li> <li>▪ Contingency measures such as re-planting, drainage repairs, adjustments to irrigation or weeding schedule, and extension of maintenance beyond the original schedule, to repair or remediate sites not on track to meet success criteria, or not meeting the criteria at the close of the originally scheduled monitoring period.</li> </ul> <p>The Integrated Weed Management Plan (Mitigation Measure VEG-2a) will be implemented throughout implementation of the HRRP. For all revegetation or restoration areas, only seed or potted nursery stock of locally occurring native species from a local source will be used for revegetation. Seeding and planting will be conducted as described in Chapter 5 of <i>Rehabilitation of Disturbed Lands in California</i> (Newton and Claassen, 2003). The list of plants observed during botanical surveys of the project area will be used as a guide to site-specific plant selection.</p> <p>For all revegetation or restoration areas, the HRRP will include objective, quantifiable success criteria, commensurate with the goals for each site. Monitoring of the reclamation, revegetation, or restoration sites will continue annually for no fewer than five (5) years or until the defined success criteria are achieved, whichever is later. SCE will be responsible for implementing remediation measures as needed. Following remediation work, each site will still be subject to the success criteria required for the initial reclamation, revegetation, or restoration. The monitoring period for remediation work will be concurrent with the monitoring period required for the initial reclamation, revegetation, or restoration.</p> <p><b>Part B: Additional habitat restoration and revegetation requirements for sensitive vegetation and special-status species habitat.</b></p> <p>For temporary disturbances in grassland/forbland that is either suitable Stephens' kangaroo rat habitat, or has 10 percent or greater relative cover of native perennial grass species (see VEG-1c), and in all other vegetation types (alluvial scrub, coast live oak woodland, coastal sage scrub, chaparral, desert scrub, riparian woodland, and aeolian sand), the Habitat Restoration and Revegetation Plan will be designed to replace the habitat values present prior to disturbance (i.e., native plant species cover, habitat structure, and soil or substrate conditions).</p>		

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	<p>Stephens' kangaroo rat habitat suitability is to be determined by a qualified SKR biologist. The following performance standards must be met by the end of the monitoring period:</p> <ul style="list-style-type: none"> <li>▪ At least 80 percent of the vegetation cover within the restoration area shall be native species that naturally occur in local native habitats; in grassland or forbland habitat this criterion will be adjusted to account for pre-disturbance non-native grass cover;</li> <li>▪ Absolute cover of native plant species and density of native shrubs and trees within the restoration areas shall equal at least 60 percent of the pre-disturbance or reference vegetation cover and density; and</li> <li>▪ The site shall have persisted successfully without irrigation or remedial planting for a minimum of two years prior to completion of monitoring.</li> </ul> <p>For revegetation or restoration in these habitats, the HRRP will include (in addition to the components listed in Part A):</p> <ul style="list-style-type: none"> <li>▪ A map depicting the locations of all temporary disturbance areas in these habitats, including a quantitative evaluation of native grass cover and Stephens' kangaroo rat habitat suitability in all mapped grassland/forbland areas, subject to requirements of Part B;</li> <li>▪ An inventory of any temporary disturbance areas that cannot be effectively revegetated or restored to replace habitat values within a five-year timeframe (these will be categorized as "long-term disturbance areas," to be addressed under habitat compensation, Mitigation Measure VEG-1e).</li> </ul> <p><b>Reporting (for Part A and Part B).</b> For all revegetation or restoration areas, SCE will provide annual reports to the CPUC and BLM verifying the total vegetation acreage subject to temporary and permanent disturbance, identifying which items of the HRRP have been completed, and which items are still outstanding. The annual reports will also include a summary of the reclamation, revegetation, or restoration activities for the year, a discussion of whether performance standards for the year were met, any remedial actions conducted and recommendations for remedial action, if warranted, that are planned for the upcoming year. Each annual report will be submitted within 90 days after completion of each year of revegetation and restoration work.</p> <p><b>Implementation locations:</b> Parts A and B of this mitigation measure shall apply as follows: San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE's PSE status); CV-MSHCP (within the CV-MSHCP regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>		
<p><b>VEG-1e:</b> Compensate for permanent habitat loss.</p>	<p><b>Compensate for permanent habitat loss.</b> SCE shall compensate for permanent or long-term habitat loss through off-site habitat acquisition and management or through participation in an approved in-lieu fee compensatory mitigation bank. This compensation may be accomplished through participation in the WR-MSHCP, CV-MSHCP (within the respective MSHCP areas) if SCE obtains PSE status. This mitigation measure will be applicable to all permanent project disturbance areas and to areas designated as temporary disturbance, but that cannot be effectively revegetated or restored to replace habitat values within a five-year timeframe.</p> <p>Habitat compensation for all permanent or long-term habitat loss that is not compensated through participation in the WR-MSHCP or CV-MSHCP will be accomplished by acquisition of mitigation land or conservation easements or by providing funding for specific land acquisition, endowment, restoration, and management actions. SCE will prepare a Habitat Compensation Plan to be reviewed and approved by the CPUC, BLM, in consultation with the USFWS and CDFW.</p> <p>SCE will acquire and protect, in perpetuity, compensation habitat to mitigate impacts to biological resources as detailed below. SCE shall be responsible for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of compensation lands. The compensation lands will be placed under conservation management to be funded through the terms described herein. If there is any conflict between the</p>	<p>SCE to prepare and submit a Draft Habitat Compensation Plan for review and approval.</p> <p>SCE or an approved third party to provide a recent preliminary title report, initial hazardous materials survey report, biological resources analysis, and other necessary or requested documents for proposed compensation lands.</p>	

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	<p>requirements of this mitigation measure and requirements of any resource agency permit (e.g., USFWS Biological Opinion or CDFW Incidental Take Permit), the more stringent requirement shall apply.</p> <p>The acreages of compensation land will be based upon final engineering calculation of impacted acreage for each resource and on ratios set forth in this measure, or in the USFWS Biological Opinion, the CDFW Streambed Alteration Agreement, the CDFW Incidental Take Permit, or the Consistency Determination, whichever presents a higher ratio. Acreages will be adjusted as appropriate for other alternatives or future modifications during implementation.</p> <p>Compensation will be provided for impacts to the following resources, at the ratios specified below (acres acquired and preserved to acres impacted). These ratios reflect multiple biological resource values, including habitat suitability for special-status species.</p> <ul style="list-style-type: none"> <li>▪ Previously disturbed lands (agriculture, developed/disturbed) and open water: n/a (no habitat compensation required)</li> <li>▪ Chaparral, desert scrub, and grassland/forbland: 1:1</li> <li>▪ Alluvial scrub, coast live oak woodland, riparian woodland, and aeolian sand: 3:1</li> <li>▪ Coastal sage scrub within USFWS designated coastal California gnatcatcher critical habitat and coastal sage scrub outside of designated critical habitat that is occupied by California gnatcatcher: 2:1</li> <li>▪ Coastal sage scrub outside of USFWS designated coastal California gnatcatcher critical habitat that is suitable habitat, but not occupied by California gnatcatcher: 1:1</li> </ul> <p>The Habitat Compensation Plan will specify compensation acreage for each habitat type, based on final engineering and on MSHCP coverage as applicable. Final compensation requirements may be adjusted to account for any deviations in project disturbance, according to the as-built shapefiles aerial imagery (Mitigation Measure VEG-1c).</p> <p><b>Compensation Land Selection Criteria.</b> Criteria for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of compensation lands for impacts to biological resources will include all of the following:</p> <ul style="list-style-type: none"> <li>▪ Compensation lands will provide habitat value that is equal to or better than the quality and function of the habitat impacted by the project, taking into consideration soils, vegetation, topography, human-related disturbance, wildlife movement opportunity, proximity to other protected lands, management feasibility, and other habitat values, subject to review and approval by CPUC and BLM;</li> <li>▪ To the extent that proposed compensation habitat may have been degraded by previous uses or activities, the site quality and nature of degradation must support the expectation that it will regenerate naturally when disturbances are removed;</li> <li>▪ Be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;</li> <li>▪ Not have a history of intensive recreational use or other disturbance that might cause future erosion or other habitat damage, and make habitat recovery and restoration infeasible;</li> <li>▪ Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;</li> <li>▪ Not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat;</li> </ul>		

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

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	<ul style="list-style-type: none"> <li>▪ Must provide wildlife movement value equal to that on the project site, based on topography, presence and nature of movement barriers or crossing points, location in relationship to other habitat areas, management feasibility, and other habitat values; and</li> <li>▪ Have water and mineral rights included as part of the acquisition, unless the CPUC and BLM, in consultation with CDFW and USFWS, agree in writing to the acceptability of land without these rights.</li> </ul> <p><b>Review and Approval of Compensation Lands Prior to Acquisition.</b> SCE shall submit a Draft Habitat Compensation Plan for review and approval by the CPUC and BLM describing the parcel(s) intended for protection. This Plan will discuss the suitability of the proposed parcel(s) as compensation lands in relation to the selection criteria listed above.</p> <p><b>Management Plan.</b> SCE or approved third party will prepare a management plan for the compensation lands in consultation with the entity that will be managing the lands. The goal of the management plan will be to support and enhance the long-term viability of the biological resources. The Management Plan will be submitted for review and approval to the CPUC and BLM, in consultation with CDFW and USFWS.</p> <p><b>Compensation Lands Acquisition Requirements.</b> SCE will comply with the following requirements relating to acquisition of the compensation lands after the CPUC and BLM have approved the proposed compensation lands:</p> <ul style="list-style-type: none"> <li>▪ <b>Preliminary Report.</b> SCE or an approved third party will provide a recent preliminary title report, initial hazardous materials survey report, biological resources analysis, and other necessary or requested documents for the proposed compensation land to the CPUC and BLM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPUC in consultation with CDFW and USFWS. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission, and the Wildlife Conservation Board.</li> <li>▪ <b>Title/Conveyance.</b> SCE will acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPUC and BLM, in consultation with USFWS and CDFW. Any transfer of a conservation easement or fee title must be to CDFW, to a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPUC and BLM. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement will be recorded in favor of CDFW or another entity approved by the CPUC and BLM. If an entity other than CDFW holds a conservation easement over the compensation lands, the CPUC and BLM may require that CDFW or another entity approved by the CPUC and BLM, in consultation with CDFW and USFWS, be named a third party beneficiary of the conservation easement. SCE will obtain approval of the CPUC and BLM of the terms of any transfer of fee title or conservation easement to the compensation lands.</li> <li>▪ <b>Initial Protection and Habitat Improvement.</b> SCE will fund activities that the CPUC and BLM may require for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. A non-profit organization, CDFW, or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPUC and BLM, in consultation with USFWS and CDFW, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFW takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFW or its designee.</li> </ul>		

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<ul style="list-style-type: none"> <li>▪ <b>Property Analysis Record.</b> Upon identification of the compensation lands, SCE will conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPUC and BLM, in consultation with USFWS and CDFW, before it can be used to establish funding levels or management activities for the compensation lands.</li> <li>▪ <b>Long-term Maintenance and Management Funding.</b> SCE will provide funding to establish an account with non-wasting capital that will be used to fund the long-term maintenance and management of the compensation lands. The amount of money will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands. SCE must obtain the BLM and Riverside County's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPUC and BLM will consult with USFWS and CDFW before deciding whether to approve an entity to hold the project's long-term maintenance and management funds. SCE will ensure that an agreement is in place with the long-term maintenance and management fund holder/manager to ensure the following requirements are met: <ul style="list-style-type: none"> <li>– <b>Interest.</b> Interest generated from the initial capital long-term maintenance and management fund will be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, habitat improvements, patrol and law enforcement activities, and any other action that is approved by the CPUC and BLM and is designed to protect or improve the habitat values of the compensation lands.</li> <li>– <b>Withdrawal of Principal.</b> The long-term maintenance and management fund principal will not be drawn upon unless such withdrawal is deemed necessary by the CPUC and BLM, or by the approved third-party long-term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.</li> <li>– <b>Pooling Long-Term Maintenance and Management Funds.</b> An entity approved to hold long-term maintenance and management funds for the project may pool those funds with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands. However, for reporting purposes, the long-term maintenance and management funds for this project must be tracked and reported individually to the CPUC and BLM.</li> </ul> </li> <li>▪ <b>Other Expenses.</b> In addition to the costs listed above, SCE will be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to CDFW or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.</li> <li>▪ <b>Delegation.</b> The responsibility for acquisition of compensation lands may be delegated to a third party, by written agreement of the CPUC and BLM, in consultation with CDFW, prior to land acquisition, enhancement or management activities.</li> </ul> <p><b>Implementation Locations:</b> This mitigation measure applies to all locations within San Bernardino County and on all BLM lands, and is recommended for implementation on all tribal lands. Within the WR-MSHCP and CV-MSHCP areas, if SCE does not obtain PSE status under the applicable MSHCP, this mitigation measure shall apply within the MSHCP area. If SCE obtains PSE status under either MSHCP, the project's permanent habitat impacts will be compensated according to the requirements of the MSHCP and this mitigation measure will not apply within the applicable MSHCP area.</p>		



**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VEG-2a:</b> Integrated weed management</p>	<p><b>Prepare and implement an Integrated Weed Management Plan.</b> [Partial MM text] SCE shall prepare and implement an Integrated Weed Management Plan (IWMP) describing the proposed methods of preventing or controlling project-related spread of weeds or new weed infestations.  <b>Reporting schedule and contents.</b> The IWMP shall specify reporting schedule and contents of each report.  <b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE's PSE status); CV-MSHCP (all, regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>SCE to implement an Integrated Weed Management Plan (IWMP) d</p>	
<p><b>VEG-3a:</b> Not net loss for jurisdictional waters and wetlands</p>	<p><b>VEG-3a: Minimize impacts and ensure no net loss for jurisdictional waters and wetlands.</b>  <b>Impact minimization.</b> Project design and construction activities shall minimize impacts to drainage features, including ephemeral or intermittent washes, streams, and wetlands to the extent feasible. This mitigation measure is not limited to wetlands or mapped "blue-line" streams, but encompasses all jurisdictional waters, generally including intermittent channels or washes.  <b>No net wetlands loss and watercourse impacts minimization</b> ...All restoration or compensation mitigation described in the HMMP shall be implemented in full. In the case of any conflict between the mitigation ratios or other requirements specified in wetland/water permits for the project and the mitigation ratios or other requirements specified in this mitigation measure, the higher mitigation ratios and more stringent requirements shall apply.  <b>Clean Water Act and California Fish and Game Code permit compliance.</b> SCE shall not proceed with any alteration or fill activities in potentially jurisdictional waters until obtaining applicable permits or authorizations, or written agency confirmation that no permit or authorization is required. SCE shall implement all terms or conditions of each permit or authorization. Regardless of any conditions specified in permits or authorizations, SCE shall prevent contaminants or pollutants from entering any state or federal jurisdictional waters.  <b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE's PSE status); CV-MSHCP (all, regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>SCE to implement Habitat Mitigation and Monitoring Plan (HMMP).  SCE to obtain permits or authorizations before alteration or fill in potentially jurisdictional waters.</p>	
<p><b>VEG-4a:</b> Special-status plants</p>	<p><b>Minimize and mitigate impacts to special-status plants.</b>  <b>Pre-construction survey.</b> SCE shall conduct focused surveys for federal- and state-listed and other special-status plants. All special-status plant species (including listed threatened or endangered species, and all CRPR 1A, 1B, 2, 3, and 4 ranked species) impacted by project activities shall be documented in pre-construction survey reports. Surveys shall be conducted during the appropriate season in all suitable habitat located within the project disturbance areas and access roads and within 100 feet of disturbance areas and access roads, and any additional area where direct or indirect effects to soils or vegetation could affect special-status plants (if present). Surveys shall be conducted by a qualified botanist. The field surveys and reporting must conform to current CDFW botanical field survey protocol (CDFG, 2009) or more recent updates, if available. The reports will describe any conditions that may have prevented target species from being located or identified, even if they are present as dormant seed or below-ground rootstock (e.g., poor rainfall, recent grazing, or wildfire). In some cases, follow-up surveys may be necessary to adequately evaluate impacts. Prior to construction, SCE shall submit pre-construction field survey reports along with maps showing locations of survey areas and special-status plants to the CPUC and BLM for review and approval in consultation with CDFW and USFWS.  If federally or state-listed plants would be affected, SCE shall notify BLM, USFWS, and CDFW to obtain the appropriate permits from CDFW and USFWS and comply with permit requirements. Additional conservation measures to protect or restore listed plant species or their habitat may be required by BLM, CDFW, or USFWS before impacts are authorized.</p>	<p>SCE to conduct pre-construction special-status plant surveys during appropriate seasons and provide reports and maps for review and approval.  Standards for buffers established in MM,  Avoidance preferred, but if not feasible, off-site compensation shall be incorporated into the project's Habitat Compensation Plan (under Mitigation Measure VEG-1e)  If salvage is deemed to be feasible, based on prior success with similar species, then SCE shall prepare and implement a Special-status Plant Salvage</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p><b>Native cactus and Yucca.</b> Most native cactus and shrubby <i>Yucca</i> species (Joshua tree and Mohave yucca) can be successfully salvaged and transplanted, and yuccas often provide an important vertical component to wildlife habitat. Therefore, native cactus (excluding chollas in the genus <i>Cylindropuntia</i>) and yuccas (excluding chaparral yucca, <i>Y. whipplei</i>), shall be avoided or salvaged according to the strategies described below.</p> <p><b>Mitigation.</b><sup>1</sup> SCE shall mitigate impacts to any state or federally listed plants or CRPR 1 or 2 ranked plants that may be located on the project disturbance areas or surrounding buffer areas through one or a combination of the following strategies.</p> <p>Avoidance of special-status plants will be the preferred strategy wherever feasible. Where avoidance is not feasible, and the project would directly or indirectly affect more than 10 percent of a local occurrence, by either number of plants or extent of occupied habitat, SCE shall prepare and implement a mitigation plan to consist of off-site compensation, salvage, or horticultural propagation and off-site introduction.</p> <ul style="list-style-type: none"> <li>▪ <b>Avoidance.</b> Where feasible, towers, access roads, and other project work areas shall be located to avoid or minimize impacts to special-status plants. Effective avoidance through project design shall include a buffer area surrounding each avoided occurrence, where no project activities will take place. The buffer area will be clearly staked, flagged, and signed for avoidance prior to the beginning of ground-disturbing activities, and maintained throughout the construction phase. The buffer zone shall be of sufficient size to prevent direct or indirect disturbance to the plants from construction activities, erosion, inundation, or dust. The size of the buffer will depend upon the proposed use of the immediately adjacent lands and the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, water availability, edaphic physical and chemical characteristics), to be specified by a qualified biologist or botanist. At minimum, the buffer for trees or shrubs species shall be equal to twice the drip line (i.e., two times the distance from the trunk to the canopy edge) to protect and preserve the root systems. The buffer for herbaceous species shall be a minimum of 50 feet from the perimeter of the occupied habitat or the individual. If a smaller buffer is necessary due to other project constraints, SCE will develop and implement site-specific monitoring and put other measures in place to avoid the take of the species, with the approval of the CPUC and BLM, in consultation with USFWS and CDFW.</li> <li>▪ <b>Off-site compensation.</b> SCE shall provide compensation lands consisting of habitat occupied by the impacted CRPR 1 or 2 ranked plants at a 1:1 ratio of acreage and number of plants for any occupied habitat affected by the project. Occupied habitat will be calculated on the project site and on the compensation lands as including each special-status plant occurrence and a surrounding 100-foot buffer area. Off-site compensation shall be incorporated into the project's Habitat Compensation Plan (under Mitigation Measure VEG-1e), for review and approval by the CPUC and BLM in consultation with CDFW and USFWS.</li> <li>▪ <b>Salvage.</b> SCE shall consult with a qualified restoration ecologist or horticulturist at a qualified institution such as Rancho Santa Ana Botanic Garden (RSABG) regarding the feasibility and likely success of salvage efforts for each species. If salvage is deemed to be feasible, based on prior success with similar species, then SCE shall prepare and implement a Special-status Plant Salvage and Relocation Plan, to be reviewed and approved by the CPUC and BLM, in consultation with CDFW and USFWS, prior to direct or indirect disturbance of any occupied habitat. For special-status plants, the goal shall be establishment of a new viable occurrence, equal or greater in extent and numbers to the affected occurrence. For cacti and yuccas, the goal shall be maximum practicable survivorship of salvaged plants. The Plan will include at minimum: (a) species and locations of plants identified for salvage; (b) criteria for determining whether an individual plant is appropriate for salvage; (c) the appropriate season for salvage; (d) equipment and methods for collection, transport, and re-planting plants or seed banks, to retain intact soil conditions and maximize success; (e) for shrubs, cacti, and yucca, a</li> </ul>	<p>and Relocation Plan, to be reviewed and approved.</p> <p>If salvage and relocation is not believed to be feasible for special-status plants, SCE to consult with RSABG, or another qualified entity, to develop an appropriate experimental propagation and relocation strategy.</p> <p>Annual monitoring reports shall be submitted to CPUC and BLM.</p>	

<sup>1</sup> An occurrence for a plant is defined as any population or group of nearby populations located more than 0.25 miles from any other population (CDFW, 2009).

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>requirement to mark each plant to identify the north-facing side prior to transport, and replant it in the same orientation; (f) details regarding storage of plants or seed banks for each species; (g) location of the proposed recipient site, and detailed site preparation and plant introduction techniques for top soil storage, as applicable; (h) a description of the irrigation, weed control, and other maintenance activities; (i) success criteria, including specific timeframe for survivorship and reproduction of each species; and (j) a detailed monitoring program, commensurate with the Plan’s goals.</p> <p>Annual monitoring reports shall be submitted to CPUC and BLM. Reports shall include, but not be limited to, details of plants salvaged, stored, and transplanted (salvage and transplanting locations, species, number, size, condition, etc.); adaptive management efforts implemented (date, location, type of treatment, results, etc.); and evaluation of success of transplantation.</p> <p>▪ <b>Horticultural propagation and off-site introduction.</b> If salvage and relocation is not believed to be feasible for special-status plants, then SCE shall consult with RSABG, or another qualified entity, to develop an appropriate experimental propagation and relocation strategy, based on the life history of the species affected. The Plan will include at minimum: (a) collection and salvage measures for plant materials (e.g., cuttings), seed, or seed banks, to maximize success likelihood; (b) details regarding storage of plant, plant materials, or seed banks; (c) location of the proposed propagation facility, and proposed methods; (d); time of year that the salvage and other practices will occur; (e) success criteria; and (f) a detailed monitoring program, commensurate with the Plan’s goals.</p> <p><b>Implementation locations outside of MSCHPs:</b> This mitigation measure shall apply to all lands in San Bernardino County, on all BLM lands, and they are recommended for implementation on Morongo Tribal Lands.</p> <p><b>Implementation locations for WR-MSHCP and CV-MSHCP:</b> If SCE does not obtain PSE status under the WR-MSHCP or CV-MSHCP, this mitigation measure shall apply in its entirety within the relevant MSHCP area. The Pre-construction Survey and Native Cactus and Yucca portions of this mitigation measure shall apply within both MSHCP areas regardless of SCE’s PSE status. If SCE obtains PSE status under either MSHCP, mitigation for the project’s impacts to special-status plants covered under the Plan may be implemented according to the requirements of the MSHCP, and the remainder of this mitigation measure will not apply within the MSHCP area for species covered under the Plan. For potential impacts to special-status plants not covered under the Plan, this measure will apply in full.</p>		
<p><b>VEG-5a:</b> Comply with tree removal requirements</p>	<p><b>Comply with local tree removal or resource protection policies.</b> SCE shall obtain permits from local jurisdictions and BLM for tree removal and other plant removal or harvest, in accordance with each applicable ordinance or policy, prior to removal or other impacts to regulated trees or other plants.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE’s PSE status); CV-MSHCP (all, regardless of SCE’s PSE [Participating Special Entity] status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>SCE to obtain required permits or approvals. [This may occur in During Construction period.]</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Biological Resources – Wildlife (NOTE: The BIO Wildlife APMs have been superseded by the following mitigation measures.)</b>			
<p><b>WIL-1a:</b> Pre-construction biological surveys</p>	<p><b>Conduct pre-construction biological resources surveys.</b> SCE shall assign qualified biologists to perform pre-construction biological surveys at each project work area and access route, and in the area surrounding each work site or access route. Survey distances will vary, as appropriate, based on target species and as stipulated by project work plans and mitigation plans, but will be no less than 300 feet surrounding each work site and along any access route being created or improved. (Improvement is considered to be both 'drive and crush' and any road work that causes greater disturbance than light blading of previously existing roads.) For project access along existing routes or routes improved during an earlier phase of the project, the survey requirement will be 100 feet. An exception would be if a greater distance is stipulated in other applicable project work plans or mitigation measures. Where suitable nest sites for raptors are present, the pre-construction surveys for raptor nests will extend to a 500-foot area surrounding the work area or road.</p> <p>Pre-construction surveys shall be planned and implemented to identify locations of special-status plants and wildlife and nesting birds occurring at work areas, other portions of the ROW, or in adjacent buffer areas. Specific pre-construction survey methods or protocols will vary according to the resources which may be present at any given site, and according to season. At minimum, SCE shall complete pre-construction surveys 10 days prior to beginning work in any given area, and repeat the surveys if the work site remains inactive for a period of ten days or more. During nesting season, a qualified biologist shall complete nesting bird surveys no more than four days prior to beginning work at any given area, and repeat the surveys regularly so long as work continues at the site during the nesting season.</p> <p>SCE shall submit resumes of all biologists performing pre-construction biological surveys to the CPUC and BLM for review and approval, in coordination with CDFW and USFWS. Results of pre-construction surveys shall be submitted to CPUC and BLM for review and approval and no work shall occur until the CPUC Environmental Monitor has validated the survey results and any applicable resource and work area boundary staking. Each pre-construction survey report shall include methods and results of the preconstruction survey, and a list of biological resources detected at each site during prior focused surveys or pre-construction surveys. The pre-construction survey report format and contents shall be subject to CPUC and BLM review and approval.</p> <p>SCE also shall conduct pre-construction "sweeps" of each work site immediately prior to beginning construction or disturbance work, to identify any vulnerable wildlife that may have entered the site. Based on the results of pre-construction surveys and sweeps, SCE or its contractor shall observe buffer areas or other access or activity restrictions to minimize potential impacts to the resources. SCE shall provide documentation of the methods and results of all pre-construction surveys, and follow-up buffer areas or other avoidance measures that are implemented, to the CPUC and BLM.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE's PSE status); CV-MSHCP (all, regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>"Pre-construction" biological surveys to be conducted during the "During Construction" period</p>	
<p><b>WIL-1b:</b> Wildlife impact avoidance and minimization</p>	<p><b>Ensure wildlife impact avoidance and minimization.</b> SCE shall undertake the following measures during the construction, restoration, and O&amp;M phases to avoid or minimize impacts to wildlife resources. Implementation of all measures shall be subject to review and approval by the CPUC and BLM in consultation with CDFW and USFWS. Impacts to nesting birds are addressed separately in Mitigation Measure WIL-1c (Prepare and implement a Nesting Bird Management Plan).</p> <ul style="list-style-type: none"> <li>▪ <b>Minimize traffic impacts.</b> SCE will specify and enforce a maximum 15 mile per hour vehicle speed limit on access roads within the ROW and project vicinity. No project-related pedestrian or vehicle traffic will be permitted outside defined work site boundaries (as marked on the site according to Mitigation Measure VEG-1c (Minimize native vegetation and habitat loss)).</li> </ul>	<p>Specific measures to avoid or minimized impacts to wildlife listed in the MM.</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<ul style="list-style-type: none"> <li>▪ <b>Minimize lighting impacts.</b> Night lighting, when in use, shall be designed, installed, and maintained to prevent side casting of light towards surrounding fish or wildlife habitat.</li> <li>▪ <b>Avoid use of toxic substances.</b> Soil bonding and weighting agents used for dust suppression on unpaved surfaces shall be non-toxic to wildlife and plants.</li> <li>▪ <b>Minimize noise and vibration impacts.</b> To minimize disturbance to wildlife nesting or breeding activities in surrounding habitat, project-related helicopter use shall be avoided or managed to the extent feasible from February 1 to August 31. Unnecessary noise (e.g., blaring radios) shall be avoided.</li> <li>▪ <b>Water.</b> Potable and non-potable water sources such as tanks, ponds, and pipes shall be covered or otherwise secured to prevent animals (including birds) from entering. Prevention methods may include storing all water within closed tanks, covering open storage ponds or tanks with 2 centimeter netting, or other means as applicable. Water applied to dirt roads and construction areas for dust abatement shall use the minimal amount needed to meet safety and air quality standards. Water sources (e.g., hydrants, tanks, etc.) shall be checked periodically by biological monitors to ensure they are not creating open water sources by leaking or consistently overfilling trucks.</li> <li>▪ <b>Worker guidelines.</b> All trash and food-related waste shall be contained in vehicles or covered trash containers and removed from the site regularly. Workers shall not feed wildlife or bring pets to the project site. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons.</li> <li>▪ <b>Wildlife netting or exclusion fencing.</b> SCE may install temporary or permanent netting or fencing around equipment, work areas, or project facilities to prevent wildlife exposure to hazards such as toxic materials or vehicle strikes, or prevent birds from nesting on equipment or facilities. Bird deterrent netting will be maintained free of holes and will be deployed and secured on the equipment in a manner that, insofar as possible, prevents wildlife from becoming trapped inside the netted area or within the excess netting. The biological monitor will inspect netting (if installed) twice daily, at the beginning and close of each work day, with the exception of netting installed in established material yards, which will be inspected at least once daily. The biological monitor will inspect exclusion fence (if installed) weekly and will inform SCE of any needed repairs; SCE shall promptly repair any damage to the exclusion fencing.</li> <li>▪ <b>Wildlife entrapment.</b> Project-related excavations shall be secured to prevent wildlife entry and entrapment. Holes and trenches shall be backfilled, securely covered, or fenced. Excavations that cannot be fully secured shall incorporate appropriate wildlife ramp(s) at a slope of no more than a 3:1 ratio, or other means to allow trapped animals to escape. Biological monitors shall provide guidance to construction crews to ensure that wildlife ramps or other means are sufficient to allow trapped animals to escape. At the end of each work day, a biological monitor shall ensure that excavations have been secured or provided with appropriate means for wildlife escape.</li> </ul> <p>All pipes or other construction materials or supplies will be covered or capped in storage or laydown areas. No pipes or tubing will be left open either temporarily or permanently, except during use or installation. Any construction pipe, culvert, or other hollow materials will be inspected for wildlife before it is moved, buried, or capped.</p> <p><b>Dead animals.</b> Dead animals of non-special-status species found on unpaved project roads, work areas, or the ROW shall be reported to the appropriate local animal control agency within 24 hours. A biological monitor shall safely move the carcass out of the road or work area as needed. Dead animals of special-status species found on unpaved project roads, work areas, or the ROW shall be reported to CDFW within one work day and the carcass handled as directed by CDFW.</p> <p><b>Injured wildlife.</b> SCE shall create and implement guidelines for dealing with injured or entrapped wildlife found on or near project roads, work areas, or the ROW, and provide these guidelines to all biological monitors. If an</p>		



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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>animal is entrapped, a qualified biological monitor shall free the animal if feasible, or work with construction crews to free the animal, in compliance with applicable safety regulations and project requirements. If biological monitors cannot free the animal or the animal is too large or dangerous for monitors to handle, SCE shall contact and work with animal control, CDFW, or other qualified party to obtain assistance for the animal as soon as possible.</p> <p>SCE shall ensure that one or more qualified biological monitors receive training in the safe and proper handling and transport of injured wildlife and are provided with the appropriate equipment. These trained and equipped monitors shall be available to capture and transport injured wildlife to a local wildlife rehabilitator or veterinarian as needed. If the injured animal is too large or dangerous for monitors to handle, or a trained and equipped monitor is not available, SCE shall contact and work with a local wildlife rehabilitator, animal control, CDFW, or other qualified party to obtain assistance for the animal as soon as possible. SCE shall bear the costs of veterinary treatment and rehabilitation for any wildlife injured by project-related activities and any injured wildlife found on or near project roads, work areas, or the ROW, unless the injuries are clearly not project-related, as determined by a qualified biologist. Additionally, any entrapped or injured special-status species found on project roads, work areas, or the ROW shall be reported to the appropriate resource agency within one work day.</p> <p><b>Rattlesnake guidelines.</b> Prior to the start of construction, SCE shall prepare and implement guidelines for dealing with rattlesnakes found in or near project work areas and access roads and provide these guidelines to all biological monitors, safety staff, and other personnel. Killing or harming rattlesnakes or other wildlife is not authorized. If SCE determines that it is appropriate for biological monitors or other project personnel to handle rattlesnakes, SCE shall ensure that an adequate number of qualified individuals are trained in the safe and proper handling of rattlesnakes and provided with the appropriate safety and snake handling equipment, including a secure storage container for transporting snakes. These trained and equipped individuals shall be available to remove rattlesnakes found in or near project work areas and access roads as needed and relocate them to appropriate nearby habitat. Other project personnel shall not harass, or handle rattlesnakes, except as required to maintain immediate safety or in accordance with the guidelines developed by SCE. Handling and relocation of rattlesnakes shall be documented, and the species of rattlesnake determined whenever possible. If a special-status rattlesnake is relocated, documentation shall be submitted to CPUC, BLM, and CDFW.</p> <p>Alternately, SCE may determine that project personnel shall not handle or approach rattlesnakes. If so, the guidelines shall specify an alternate course of action for rattlesnake encounters, such as avoiding work activity near the snake and monitoring its location and activity until it leaves the area.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE's PSE status); CV-MSHCP (all, regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>		
<p><b>WIL-1c:</b> Nesting bird management</p>	<p><b>Prepare and implement a Nesting Bird Management Plan.</b> [Partial MM text]...Project-related disturbance including construction and pre-construction activities shall not proceed within 300 feet of active nests of common bird species or 500 feet of active nests of raptors or special-status bird species (except for golden eagle as described in Mitigation Measure WIL-2f) until approval of the NBMP by CPUC and BLM in consultation with CDFW and USFWS.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (all, regardless of SCE's PSE status); CV-MSHCP (all, regardless of SCE's PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>Implement the approved Nesting Bird Management Plan</p>	
<p><b>WIL-2a:</b> Desert tortoise protection</p>	<p><b>Conduct desert tortoise surveys, monitoring, and avoidance.</b> Methods for clearance surveys, fence specification and installation, tortoise handling, artificial burrow construction, egg handling, and other procedures shall be consistent with those described in the USFWS (2009) <i>Desert Tortoise Field Manual</i> or more current guidance provided by CDFW and USFWS.</p>	<p>Survey for desert tortoise over 100% of area to be disturbed plus 100 foot buffer.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>Desert tortoise shall be handled only by a USFWS/CDFW permitted and authorized biologist (Authorized Biologist) following appropriate USFWS protocols and in compliance with appropriate regulatory permits. A biological monitor shall monitor construction activities in all areas with the potential to support desert tortoise. Observations of desert tortoise or sign shall be immediately communicated to the Authorized Biologist.</p> <p>Within suitable habitat for desert tortoise, SCE shall survey the project area for desert tortoise burrows and pallets within fourteen (14) days preceding the initial start of construction. Follow-up surveys shall also be conducted within fourteen (14) days preceding additional construction after a gap in significant construction activities of 60 calendar days or more. Surveys shall include 100 percent of the area to be disturbed and a surrounding buffer of 100 feet.</p> <p>Subject to authorization by CDFW and USFWS, tortoise burrows and pallets encountered within the disturbance area (if any) shall be conspicuously flagged by the surveying biologist(s) and avoided during construction activities. If a burrow suitable for desert tortoise cannot be avoided, it shall be excavated carefully using hand tools, by or under the supervision of an Authorized Biologist, and collapsed or blocked to prevent desert tortoise reentry. If the burrow is occupied, the Authorized Biologist may move the tortoise to another burrow.</p> <p>Project personnel shall inspect for desert tortoises under parked vehicles or equipment prior to moving same. If a desert tortoise is found beneath a vehicle or equipment, the vehicle or equipment shall not be moved until the tortoise has voluntarily moved to a safe distance away. If the tortoise does not move on its own accord after 20 minutes, the tortoise may be moved by an Authorized Biologist, subject to authorization by CDFW and USFWS.</p> <p>If a desert tortoise is found in a work area, the tortoise shall be allowed to passively traverse the site while construction in the immediate area is halted. If the tortoise does not move out of harm's way after 20 minutes, the tortoise may be moved by an Authorized Biologist, subject to conditions and authorization by CDFW and USFWS.</p> <p>Subject to authorization by CDFW and USFWS, desert tortoises shall be moved the minimum distance possible within appropriate habitat. In general, desert tortoise will not be moved in excess of 1,000 feet for adults and 300 feet for hatchlings. Desert tortoises that are moved shall be placed in the shade of a shrub. After being moved, the desert tortoise shall be monitored to ensure its safety. Any time a tortoise is handled, the Authorized Biologist shall take photographs and record pertinent data in their daily monitoring report. This information shall be summarized and submitted to CPUC and BLM in annual environmental compliance reports.</p> <p>Subject to authorization by CDFW and USFWS, a desert tortoise removed from its burrow shall be placed in an unoccupied burrow of approximately the same size and orientation. If an existing burrow is unavailable, the Authorized Biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in the new burrow to ensure their safety.</p> <p>Subject to authorization by CDFW and USFWS, if a desert tortoise is moved at a time of the day when ambient temperatures are unfavorable (less than 40 degrees F or greater than 90 degrees F), it shall be held overnight in a clean cardboard box. The desert tortoise shall be kept in the care of the Authorized Biologist under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes will be appropriately discarded after one use.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply in desert tortoise habitat within the project area (Segments 5 and 6), subject to the stipulations listed above. Specifically, this mitigation measure applies on BLM lands, throughout the CV-MSHCP area (regardless of SCE's PSE status), and is recommended on all Morongo Tribal Lands. No suitable desert tortoise habitat is present within San Bernardino County and the WR-MSHCP; therefore, this mitigation measure does not apply in these jurisdictions.</p>	<ul style="list-style-type: none"> <li>▪ 14 days prior to initial construction and</li> <li>▪ 14 days prior to construction if gap between significant construction activities is 60 days or more.</li> </ul> <p>Desert tortoise handling only by permitted Authorized Biologist.</p> <p>In work areas, tortoise burrows and pallets (shallow depressions under shrubs providing resting areas) to be flagged and avoided.</p> <p>Inspect under parked vehicles or equipment prior to moving.</p> <p>Limit distance tortoise to be moved – 1,000 feet adult, 300 feet hatchlings. Record moving in daily report.</p> <p>Substitute burrow may be constructed and monitored.</p> <p>Temps over 90 deg. F, hold overnight in clean cardboard box by Authorized Biologist, and released when temps are favorable. Discard box.</p>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>WIL-2b:</b> Raven control</p>	<p><b>Prepare and implement Raven Monitoring, Management, and Control Plan.</b> [Partial MM text]... The threshold for implementation of raven control measures shall be any increases in raven numbers from baseline conditions, as detected by monitoring to be implemented pursuant to the Plan. Regardless of raven monitoring results, SCE shall be responsible for all other aspects of raven management described in the Raven Plan, such as avoidance and minimization of project-related trash, water sources, or perch/roost/nest sites that could contribute to increased raven numbers. ...</p> <p><b>Implementation locations:</b> This mitigation measure applies on BLM lands and is recommended on all Morongo Tribal Lands. No suitable desert tortoise habitat is present within San Bernardino County and the WR-MSHCP; therefore, this mitigation measure does not apply in these jurisdictions. In the CV-MSHCP, this mitigation measure shall apply in its entirety regardless of SCE's PSE status.</p>	<p>SCE to implement Raven Plan.</p>	
<p><b>WIL-2c:</b> Riparian bird protection</p>	<p><b>Conduct surveys and avoidance for threatened or endangered riparian birds.</b> Construction activities shall avoid suitable habitat for listed riparian birds. If suitable habitat cannot be avoided, SCE shall consult with CDFW and USFWS and obtain appropriate take authorizations or permits. SCE shall implement the conservation measures contained within these permits.</p> <p>If construction activities will occur during the breeding season [in] potentially suitable habitat for listed riparian birds, a qualified biologist shall conduct protocol surveys of the project area and adjacent areas within 500 feet. USFWS protocol surveys shall be conducted for southwestern willow flycatcher, yellow-billed cuckoo, and least Bell's vireo. The surveys shall be of adequate duration to verify potential nest sites if work is scheduled to occur during the breeding season. Where protocol surveys determine that listed riparian birds are present, SCE shall conduct additional focused nest location surveys, to determine the locations of nests and territories. Survey areas shall include a 500-foot buffer around project disturbance areas.</p> <p>Protocol surveys, shall be conducted within one year prior to the start of construction and shall continue annually during each nesting season until completion of construction and restoration activities. At a minimum, surveys shall be conducted from 15 May to 17 July for southwestern willow flycatcher, from 10 April to 31 July for least Bell's vireo, and from 1 June to 31 August for yellow-billed cuckoo.</p> <p>These surveys may be modified through coordination with the USFWS, CDFW, BLM, and the CPUC based on the condition of habitat, the observation of the species, or avoidance of riparian areas during the breeding season. SCE shall submit documentation providing results of the protocol surveys for listed riparian birds to the CPUC and BLM for review and approval in consultation with USFWS and CDFW.</p> <p>If an active breeding territory or nest is confirmed, the CPUC, BLM, USFWS, and CDFW shall be notified immediately. All active nests shall be monitored on a weekly basis until the nestlings fledge or the nest becomes inactive. SCE shall provide monitoring reports to the CPUC and BLM for review in consultation with USFWS and CDFW.</p> <p>In coordination with the USFWS and CDFW, a 500-foot disturbance-free ground buffer and 1,000-foot vertical helicopter buffer shall be established around the active nest and demarcated by fencing or flagging. No construction or vehicle traffic shall occur within nest buffers, except on existing paved public roads.</p> <p>If an active breeding territory or nest is confirmed within 500 feet of any project activity site, SCE shall prepare and implement a Wildlife Noise Monitoring Plan throughout construction and demolition activities taking place while listed riparian birds occupy the nesting territory. Sound levels at the nest sites shall not exceed 8 dBA above ambient levels or 70 dBA (hourly average Leq), whichever is greater. Ambient levels will be established prior to initiation of construction and demolition, using the same methodology that will be used to take noise measurements during monitoring.</p> <p>If the hourly average noise threshold is exceeded, or if the biological monitor determines that construction activities are disturbing nesting birds, additional noise reduction techniques shall be implemented to reduce</p>	<p>See also MM WIL-1c: Prepare and implement a Nesting Bird Management Plan.</p> <p>If construction to occur during breeding season in suitable habitat for listed riparian birds (southwestern willow flycatcher, yellow-billed cuckoo, and least Bell's vireo), then:</p> <ul style="list-style-type: none"> <li>▪ Conduct protocol surveys 1 year prior to start of construction</li> <li>▪ Continue annually until construction and restoration activities are complete</li> </ul> <p>Submit survey documentation to CPUC/BLM.</p> <p>Establish 500 foot ground and 1,000 foot vertical (helicopter) buffer around nest(s)</p> <p>If nest within 500 feet, prepare and implement Wildlife Noise Monitoring Plan.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>project noise below the thresholds. Additional noise monitoring will be conducted to verify the reduction of noise levels below the thresholds. Noise reduction techniques can include, but are not limited to:</p> <ul style="list-style-type: none"> <li>▪ Temporary noise barriers or sound walls</li> <li>▪ Noise pads or dampers</li> <li>▪ Replace and update noisy equipment</li> <li>▪ Moveable task noise barriers</li> <li>▪ Queue trucks to distribute idling noise</li> <li>▪ Locate vehicle access points and loading and shipping facilities away from the nest site</li> <li>▪ Reduce the number of noisy activities that occur simultaneously</li> <li>▪ Relocate noisy stationary equipment away from the nest sites</li> </ul> <p><b>Implementation locations:</b> This mitigation measure applies on BLM lands, throughout the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and within San Bernardino County, and is recommended on all Morongo Tribal Lands.</p>		
<p><b>WIL-2d:</b> Stephens' kangaroo rat</p>	<p><b>Conduct surveys and avoidance for Stephens' kangaroo rat.</b> Prior to the start of construction, within suitable habitat for Stephens' kangaroo rat (SKR), SCE shall conduct focused surveys to determine if SKR sign (burrows, scat, and etc.) is present in all areas within 100 feet of work sites or other project activities that would permanently or temporarily affect soils or vegetation. All surveys shall be conducted by a qualified biologist who holds the appropriate USFWS permits to conduct trapping surveys for SKR. If sign is present, then SCE shall conduct focused trapping surveys according to accepted protocols to determine presence or absence of SKR. If SKR are present, then SCE shall take additional measures to prevent or minimize take, such as installation of exclusion fences or other measures, subject to authorization by USFWS and CDFW.</p> <p>Construction activities shall avoid suitable SKR habitat to the extent feasible. If SKR habitat cannot be avoided, SCE shall consult with CDFW and USFWS and obtain appropriate take authorization or permits. SCE shall implement the conservation measures contained within these permits.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, throughout the WR-MSHCP area (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands. No suitable SKR habitat is present in the CV-MSHCP portions of the ROW or on BLM land, so this mitigation measure shall not apply within those areas.</p>	<p>Conduct focused surveys for SKR prior to construction in suitable habitat for SKR. Survey within 100 feet of work sites or project activities the affect soils or vegetation.</p> <p>If SKR sign present, conduct focused trapping surveys. If SKR present, take measures to prevent or minimize take.</p> <p>Comply with permits.</p>	
<p><b>WIL-2e:</b> Coastal California gnatcatcher</p>	<p><b>Conduct surveys and avoidance for coastal California gnatcatcher.</b> SCE shall conduct protocol level surveys for coastal California gnatcatchers (CAGN) in all areas of coastal sage scrub habitat that may be affected by the project. Survey areas will include a 500-foot buffer around project disturbance areas. Presence or absence of CAGN shall be determined prior to construction activities. In occupied CAGN habitat, SCE shall conduct additional focused nest location surveys to determine the locations of nests and territories. Survey areas shall include a 500-foot buffer around project disturbance areas.</p> <p>Surveys shall be conducted by qualified and permitted biologists. Surveys shall be of adequate duration to verify potential nest sites if work is scheduled to occur during the breeding season. Prior to construction, SCE shall submit documentation providing the results of the pre-construction focused surveys for CAGN to the CPUC and BLM for review and approval in consultation with USFWS and CDFW.</p> <p>Protocol or focused nest location surveys, as appropriate, shall be conducted within one year prior to the start of construction and shall continue annually until completion of construction and restoration activities.</p> <p>If an active breeding territory or nest is confirmed, the CPUC, BLM, USFWS, and CDFW shall be notified immediately and the observation will be included in the daily monitoring report. All active nests shall be monitored on a weekly basis until the nestlings fledge or the nest becomes inactive. SCE shall provide monitoring reports to the CPUC and BLM for review on a weekly basis.</p>	<p>Conduct focused surveys for CAGN prior to construction in suitable habitat for GAGN. Survey within 500 feet project disturbance areas.</p> <p>In occupied GAGN habitat, conduct focused nest location surveys, including 500-foot buffer around disturbance areas. Submit survey results.</p> <p>Monitor active nests weekly until nestlings fledge or nes becomes inactive.</p> <p>Establish 500-foot ground and 1,000 foot vertical buffer around</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>In coordination with the USFWS and CDFW, a 500-foot disturbance-free ground buffer and 1,000-foot vertical helicopter buffer shall be established around the active nest and demarcated by fencing or flagging. These buffers may be adjusted in consultation with USFWS and CDFW based on type of work activity performed. No construction or vehicle traffic shall occur within nest buffers, except on existing paved public roads.</p> <p>If an active breeding territory or nest is confirmed within 500 feet of any project activity site, the authorized nesting bird monitor shall monitor the nesting bird to evaluate impacts to the bird. If the construction, and associated noise, impacts nesting, in the opinion of the authorized nesting bird monitor, construction within 500 feet will immediately discontinue. If the authorized nesting bird monitor determines that construction may continue, SCE shall prepare and implement a Wildlife Noise Monitoring Plan throughout construction and demolition activities taking place while CAGN occupy the nesting territory. Sound levels at the nest sites shall not exceed 8 dBA above ambient levels or 70 dBA (hourly average Leq), whichever is greater. Ambient levels will be established prior to initiation of construction and demolition, using the same methodology that will be used to take noise measurements during monitoring.</p> <p>If the hourly average noise threshold is exceeded, or if the biological monitor determines that construction activities are disturbing nesting CAGN, additional noise reduction techniques shall be implemented to reduce project noise below the thresholds. Additional noise monitoring will be conducted to verify the reduction of noise levels below the thresholds. Noise reduction techniques can include, but are not limited to:</p> <ul style="list-style-type: none"> <li>▪ Temporary noise barriers or sound walls</li> <li>▪ Noise pads or dampers</li> <li>▪ Replace and update noisy equipment</li> <li>▪ Moveable task noise barriers</li> <li>▪ Queue trucks to distribute idling noise</li> <li>▪ Locate vehicle access points and loading and shipping facilities away from the nest site</li> <li>▪ Reduce the number of noisy activities that occur simultaneously</li> <li>▪ Relocate noisy stationary equipment away from the nest sites</li> </ul> <p>Construction activities shall avoid suitable habitat for CAGN, to the extent feasible. If suitable habitat cannot be avoided, SCE shall consult with CDFW and USFWS to obtain appropriate take authorization, permits, and/or Participating Special Entity (PSE) status. SCE shall implement the conservation measures contained within these permits.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, throughout the WR-MSHCP lands (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands. No suitable CAGN habitat is present in the CV-MSHCP portions of the ROW or on BLM land, so this mitigation measure shall not apply within those areas.</p>	<p>active nest and demarcate buffer with fencing or flagging.</p> <p>If nest within 500 feet, prepare and implement Wildlife Noise Monitoring Plan.</p>	



**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>WIL-2f:</b> Golden eagle</p>	<p><b>Conduct surveys and avoidance for golden eagle.</b> SCE shall implement the following measures to document golden eagle occurrence in the project area and surrounding mountains. Survey schedule and requirements will be as identified below unless otherwise authorized by the CPUC and BLM in consultation with the USFWS and CDFW.</p> <ul style="list-style-type: none"> <li>▪ <b>Annual Nesting Season Surveys.</b> Beginning at least one year prior to the start of construction, and continuing throughout the construction phase of the project, SCE shall contract with a qualified biologist to conduct nesting season surveys of golden eagle habitat use within a 2-mile radius of the portions of the project area where work will occur during the breeding season (December 1 through July 31). Nesting season surveys will determine occupancy, productivity, and chronology of known or newly discovered nesting territories within the 2-mile radius. Survey methods for the inventory shall be either ground-based or helicopter-based, as described in the Golden Eagle Technical Guidance (Pagel et al., 2010) or more current guidance from the USFWS.</li> <li>▪ <b>Nesting Season Inventory Data.</b> At a minimum, data collected during the nesting season surveys shall include the following: territory status (unknown, vacant, occupied, breeding successful, breeding unsuccessful); nest location, nest elevation; age class of golden eagles observed; nesting chronology; number of young at each visit; photographs; and substrate upon which nest is placed.</li> <li>▪ <b>Determination of Unoccupied Territory Status.</b> A nesting territory or inventoried habitat shall be considered unoccupied by golden eagles only after completing at least two full surveys in a single breeding season.</li> <li>▪ <b>Nest Buffer.</b> If an occupied nest (as defined by Pagel et al., 2010) is detected within 2 miles of the project, SCE shall implement a one mile line-of-sight and one-half mile no line-of-sight buffer to ensure that project construction activities do not result in injury or disturbance to golden eagles. Triggers for adaptive management shall include any evidence of project-related disturbance to nesting golden eagles, including but not limited to: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment. Adaptive management actions, include, but are not limited to, cessation of construction activities that are deemed by a qualified biologist to be the source of golden eagle disturbance.</li> <li>▪ <b>Reporting.</b> Golden eagle survey data and, if applicable, nest activity monitoring results and any adaptive management actions taken, will be provided to CPUC, BLM, CDFW, and USFWS in monthly monitoring reports, as seasonal data becomes available and if specific nest monitoring or any adaptive management actions are taken, and summarized in annual project monitoring reports.</li> </ul> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, and within the CV-MSHCP and WR-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>Beginning at least 1 year prior to construction and continuing throughout construction phase, conduct nesting season surveys of golden eagle habitat use within 2-mile radius of project (Season: 12/1 through 7/1).</p> <p>MM identifies minimum data collection and survey periods.</p> <p>For occupied nests within 2 miles, implement 1 mile line-of-sight and ½ mile no line-of-sight buffer.</p> <p>Report on surveys and nest activity monitoring.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>WIL-2g:</b> Burrowing owl</p>	<p><b>Conduct surveys and avoidance for burrowing owl.</b> [Partial MM text] Burrowing owl surveys shall be conducted in accordance with the most current CDFW guidelines (CDFG, 2012; or updated guidelines as they become available). SCE shall take measures to avoid impacts to any active burrowing owl burrow within or adjacent to a work area. The default buffer for a burrowing owl burrow is 300 feet for ground construction, and 300 feet horizontal and 200 feet vertical for helicopter construction. The Nesting Bird Management Plan (Mitigation Measure WIL-1c) will specify a procedure for adjusting this buffer, if needed. Binocular surveys may be substituted for protocol field surveys on private lands adjacent to the project site only when SCE has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission.</p> <p>If active burrowing owl burrows are located within project work areas, SCE may passively relocate the owls by preparing and implementing a Burrowing Owl Passive Relocation Plan</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, and within the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>Comply with Burrowing Owl Passive Relocation Plan</p>	
<p><b>WIL-2h:</b> Special-status terrestrial herpetofauna</p>	<p><b>Conduct surveys and avoidance for special-status terrestrial herpetofauna.</b> This measure will not apply to desert tortoise; instead, surveys and avoidance for desert tortoise are addressed in Mitigation Measure WIL-2a. Biological monitors shall conduct clearance surveys in areas with suitable habitat for special-status terrestrial herpetofauna prior to construction each day, monitor construction activities for compliance, and submit monitoring reports to the CPUC and BLM for review on a weekly basis. Following the clearance surveys, [if special-status species or sign of special-status species are present] either (1) exclusion fencing will be erected or (2) a biological monitor will be on the site during construction activities, to prevent take of special-status herpetofauna. If the installation of exclusion fencing is deemed necessary, the biological monitor shall direct the installation of the fence.</p> <p>If any terrestrial herpetofauna are found on the construction site, the animal will be allowed to move away from the construction site on its own, or a qualified biologist will relocate it nearby suitable habitat outside the construction area and place it in the shade of a shrub. If potentially suitable burrows or rock piles are found, they will be checked for occupancy. Occupied burrows will be flagged and avoided (employing a 50-foot buffer) during construction. If the burrow cannot be avoided, it will be excavated and the occupant relocated to an unoccupied burrow outside the construction area and of approximately the same size as the one from which it was removed. If an existing burrow is unavailable, the biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, within the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>Desert tortoise are covered under MM WIL-2a.</p> <p>Conduct clearance surveys in areas with suitable habitat prior to each day of construction.</p> <p>Install exclusion fencing or monitor during construction to prevent take.</p> <p>Burrows get a 50-foot flagged buffer. If animal is relocated, must go to unoccupied burrow or to a constructed burrow.</p>	
<p><b>WIL-2i:</b> Bats</p>	<p><b>Conduct surveys and avoidance for bats.</b> SCE shall conduct surveys for roosting bats within 300 feet of project activities, within 14 days prior to any grading of rocky outcrops or removal of towers or trees, particularly palm trees and large trees (12 inches in diameter or greater at 4.5 feet above grade) with loose bark or other cavities. Surveys shall be conducted during the breeding season (1 March to 31 July) and the non-breeding season. Surveys shall be performed by a qualified bat biologist (i.e., a biologist holding a CDFW collection permit and a Memorandum of Understanding with CDFW allowing the biologist to handle bats). The resume of the biologist shall be provided to the CPUC and BLM for concurrence in consultation with CDFW and USFWS prior to the biologist beginning field duties on the project. Surveys shall include a minimum of one day and one evening. Any active bat roosts, including occupied day roosts, maternity roosts, and hibernacula, will be identified and clearly marked. An exclusion area will be established 165 feet from any active roost, and these areas will be</p>	<p>Conduct surveys for roosting bats for a minimum of one day and one evening:</p> <ul style="list-style-type: none"> <li>▪ Within 300 feet of project activities, and</li> <li>▪ Within 14 days prior to grading of outcrops or removal of towers or trees.</li> </ul>	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>avoided during construction activities. If active roosts are found, then focused surveys shall be conducted to determine if the sites support special-status bat species.</p> <p>SCE shall submit documentation providing pre-construction survey results and any avoidance of roosting and nursery sites to the CPUC and BLM for review and approval.</p> <p><b>Non-special-status bats.</b> If non-breeding bat hibernacula are found in towers or trees scheduled to be removed or in crevices in rock outcrops within the grading footprint, the bats shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures must be sufficiently warm for bats to exit the roost because bats do not typically leave their roost daily during winter months in southern coastal California. This action will allow all bats to leave during the course of one week. Roosts that need to be removed, in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist, shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one night between initial disturbance and the grading or tree removal).</p> <p>If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied by the roost shall be avoided (i.e., not removed) by the project. If avoidance of the maternity roost is not feasible, the bat biologist shall survey (through the use of radio telemetry or other CDFW approved methods) for nearby alternative maternity colony sites. If the bat biologist determines in consultation with and with the approval of the CDFW, BLM, and CPUC that there are alternative roost sites used by the maternity colony and young are not present, then no further action is required and it will not be necessary to provide alternate roosting habitat. However, if there are no alternative roost sites used by the maternity colony, substitute bat roosting habitat shall be provided, as detailed below. If an active maternity roost is located in an area to be impacted by the project, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to 1 March) or after young are flying (i.e., after 31 July) using the exclusion techniques described above.</p> <p>If a maternity roost will be impacted by the project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the project site no less than three months prior to the eviction of the colony. Alternative roost sites will be constructed in accordance with the specific bats requirements in coordination with CDFW. By making the roosting habitat available prior to eviction, the colony will have a better chance of finding and using the roost. Large concrete walls (e.g., on bridges) on south or southwestern slopes that are retrofitted with slots and cavities are an example of structures that may provide alternative roosting habitat appropriate for maternity colonies. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. The CDFW shall also be notified of any hibernacula or active nurseries within the construction zone.</p> <p><b>Special-status bats.</b> If special-status bat species occur at these day roosts, maternity roosts, or hibernacula, then construction activities shall avoid these sites and a surrounding buffer distance of 300 feet. If construction activities cannot avoid these sites, construction at these sites shall be delayed until the breeding cycles for the special-status bats are completed. SCE shall consult with a bat specialist in order to determine when the breeding cycle for the special-status bats is completed. SCE shall consult with CDFW regarding eviction of non-breeding special-status bats.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, within the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>Provide resume of qualified biologist to CPUC/BLM prior to beginning duties on project.</p> <p>Non-special-status bats in non-breeding state may be evicted using means approved by qualified bat biologist.</p> <p>Maternity roosts are to be avoided and not removed. If alternative roost sites are present, no action is required and the maternity roost may be demolished prior to March 1 or after young are flying, after July 31</p> <p>If there are no alternative roosts sites used by the maternity colony, substitute bat roosting habitat shall be provided no less than 3 months prior to eviction of the colony.</p> <p>For special-status bats day roosts and maternity roosts are to be avoided and a 300-foot buffer established. If construction cannot avoid these sites, construction shall be delayed until the breeding cycle is completed.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>WIL-2j:</b> Special-status small mammals</p>	<p><b>Conduct surveys and avoidance for special-status small mammals.</b> SCE shall implement pre-construction surveys for special-status small mammals including San Diego black-tailed jackrabbit, northwestern San Diego pocket, pallid San Diego pocket mouse, Palm Springs pocket mouse, Los Angeles pocket mouse, Palm Springs round-tailed ground squirrel, and San Diego desert woodrat in suitable habitats. SCE shall submit documentation providing pre-construction survey results to the CPUC and BLM for review and approval in consultation with CDFW and USFWS. Prior to initiating construction-related activities, SCE shall prepare and implement construction minimization measures and habitat conservation measures for review and approval by CPUC and BLM in consultation with USFWS and CDFW to minimize habitat loss and potential take.</p> <p>Active woodrat nests that may be occupied by <i>Neotoma lepida</i> shall be flagged and ground-disturbing activities shall be avoided within a minimum of 10 feet surrounding each active nest unless otherwise authorized by the CDFW and CPUC. If avoidance is not possible, SCE shall take the following sequential steps: (1) all understory vegetation will be cleared in the area immediately surrounding active nests followed by a period of one night without further disturbance to allow woodrats to vacate the nest, (2) each occupied nest will then be disturbed by a qualified wildlife biologist until all woodrats leave the nest and seek refuge off-site, and (3) the nest sticks shall be removed from the project site and piled at the base of a nearby shrub or tree. Relocated nests shall not be spaced closer than 100 feet apart, unless a qualified wildlife biologist has determined that a specific habitat can support a higher density of nests. SCE shall document all woodrat nests moved in weekly monitoring reports, and will include a written summary in each annual report to the CPUC, BLM, and CDFW. The resumes of the qualified biologists shall be provided to the CPUC and BLM (as appropriate) for concurrence.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, within the WR-MSHCP and CV-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>Conduct pre-construction surveys for special-status small mammals.</p> <p>Submit results to CPUC/BLM.</p> <p>SCE prepare and implement construction minimization measures and habitat conservation measures for review and approval by CPUC/BLM.</p> <p>For woodrat nests, follow procedures in MM.</p> <p>Provide resume of qualified biologist to CPUC/BLM.</p>	
<p><b>WIL-2k:</b> American badger, ringtail, and desert kit fox</p>	<p><b>Conduct surveys and avoidance for American badger, ringtail, and desert kit fox.</b> SCE shall conduct pre-construction surveys for desert kit fox, ringtail, and American badger no more than 30 days prior to initiation of construction activities. Surveys shall be conducted in areas that contain habitat for these species and shall include project disturbance areas and access roads plus a 300 buffer surrounding these areas. SCE shall submit documentation providing pre-construction survey results to the CPUC and BLM for review and approval. If dens are detected, each den shall be classified as inactive, potentially active, active non-natal, or active natal.</p> <p>Inactive dens located in project disturbance areas may be excavated by hand and backfilled to prevent reuse, only upon confirmation that they are inactive.</p> <p>Active or potentially active dens shall be flagged and project activities, with exceptions as listed below, within 100 feet (non-natal dens) or 500 feet (natal dens, or any active den during the breeding season) shall be avoided. Ingress/egress of construction vehicles and equipment through buffers and low intensity activities such as inspections and BMP maintenance within buffers is allowed, provided a qualified biologist determines that these activities will not impact dens or denning animals. Buffers may be modified with concurrence of CPUC and BLM, in consultation with CDFW and USFWS. If active dens are found within project disturbance areas and avoidance is not possible, SCE shall take action as specified below, after notifying and obtaining concurrence from CPUC, BLM, and CDFW.</p> <p><b>Active and potentially active non-natal dens.</b> Outside the breeding season, any potentially active dens that would be directly impacted by construction activities shall be monitored by a qualified mammologist or biologist for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den may be excavated and backfilled by hand. If tracks are observed, the den may be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for</p>	<p>Conduct surveys no more than 30 days prior to initiation of construction in areas that contain habitat for these species. Include disturbance areas and access roads plus a 300-foot buffer.</p> <p>Classify dens as inactive, potentially active, active non-natal, or active natal.</p> <p>Treat each type of den per requirements in MM.</p> <p>Active &amp; potential active dens in non-breeding season:</p> <ul style="list-style-type: none"> <li>▪ Monitor for 3 consecutive nights. If inactive, den may be excavated and backfilled by hand</li> <li>▪ If tracks observed, progressively block with</li> </ul>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<p>the next three to five nights to discourage continued use. After verification that the den is no longer active, the den may be excavated and backfilled by hand.</p> <p><b>Active natal dens.</b> Active natal dens (any den with cubs or pups) or any den active during the breeding season will not be excavated or passively relocated. The cub or pup-rearing season is generally from January 15 through mid-September. A 500-foot no-disturbance buffer shall be maintained around all active natal dens. Discovery of an active natal den that could be impacted by the project shall be reported to the CPUC, BLM, and CDFW within 24 hours of the discovery along with a map of the den location and a copy of the survey results. A qualified biologist shall monitor the natal den until he or she determines that the pups have dispersed. Any disturbance to denning animals or activities that might disturb denning activities shall be prohibited within the buffer zone. Once the pups have dispersed, methods listed above for non-natal dens may be used to discourage den reuse. After verification that the den is unoccupied, it shall then be excavated by hand and backfilled to ensure that no animals are trapped in the den.</p> <p>If canine distemper is reported in desert kit fox on the site or surrounding areas, then SCE shall coordinate with CPUC, BLM, and CDFW to identify appropriate actions prior to continuing implementation of this mitigation measure in respect to desert kit fox. Any observations of a kit fox that appears sick or any kit fox mortality shall be reported to CPUC, CDFW, and BLM within one work day.</p> <p>In the event that passive relocation techniques fail, SCE shall contact the CPUC, BLM, and CDFW to explore other relocation options.</p> <p>All den monitoring and excavation activities and passive relocations shall be documented and reported to the CDFW, BLM, and CPUC in weekly monitoring reports, and a written summary will be included in each annual monitoring report.</p> <p><b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, on BLM lands, within the CV-MSHCP and WR-MSHCP areas (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands.</p>	<p>natural materials over 3 to 5 nights to discourage use, then excavate and backfill by hand.</p> <p>Active dens in breeding season:</p> <ul style="list-style-type: none"> <li>▪ May not be excavated or passively relocated</li> <li>▪ 500-foot no-disturbance buffer maintained around active natal dens.</li> <li>▪ Monitor until determined pups have disbursed – then may use methods for non-active dens to discourage use.</li> </ul> <p>If canine distemper is report in desert kit fox in area, coordinate with CPUC/BLM/CDFW to determine appropriate to continue implementation of measure.</p> <p>Document and report monitoring and excavation /relocation activities.</p>	
<p><b>WIL-3a:</b> Bird collision</p>	<p><b>Evaluate bird collision risk and implement APLIC design guidelines.</b> SCE shall adhere to recommendations published by APLIC (2012, <i>Reducing Avian Collisions with Power Lines: The State of the Art in 2012</i>).</p>	<p>Implement APLIC guidelines.</p>	
<p><b>Cultural Resources (NOTE: The Cultural APMs have been superseded by the following mitigation measures.)</b></p>			
<p><b>CL-1a:</b> Cultural surveys to avoid sensitive areas</p>	<p><b>Avoid environmentally sensitive areas.</b> SCE shall perform focused pre-construction surveys for any project areas not yet surveyed (e.g. new or modified staging areas, pull sites, or other work areas). Resources discovered during the surveys would be subject to Mitigation Measures CL-1b (Develop Cultural Resource Management Plan [CRMP]) and CL-1d (Conduct construction monitoring). Where operationally feasible, all NRHP- and CRHR-eligible resources shall be protected from direct project impacts by project redesign (i.e., relocation of the line, ancillary facilities, or temporary facilities or work areas). In addition, all historic properties/historic resources shall be avoided by all project construction, operation and maintenance, and restoration activities. Avoidance mechanisms shall include fencing off such areas as Environmentally Sensitive Areas (ESAs) for the duration of the Proposed Project or as outlined in the CRMP.</p>	<p>SCE to perform pre-construction cultural resource surveys in areas not yet surveyed.</p> <p>Where feasible, NRHP- and CRHR-eligible resources to be protected from direct impacts. Historic properties/resources to be avoided. ESAs to be established.</p>	



**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>CL-1b:</b> Develop and implement a CRMP</p>	<p><b>Develop Cultural Resource Management Plan (CRMP)</b></p>	<p>SCE to implement Cultural Resource Management Plan</p> <p>Contents of CRMP defined in MM.</p> <p>Mitigation and treatment plans for unanticipated discoveries shall be reviewed by appropriate Native Americans and approved by the BLM, CPUC, and the California Office of Historic Preservation (OHP) prior to implementation.</p> <p>The BLM will retain ownership of artifacts collected from BLM managed lands. SCE shall attempt to gain permission for artifacts from privately held land to be curated with the other project collections.</p>	
<p><b>CL-1c:</b> Train personnel regarding cultural resources</p>	<p><b>Train construction personnel.</b> Prior to the initiation of construction, all construction personnel shall be trained, by a qualified archaeologist, regarding the recognition of possible buried cultural resources (i.e., prehistoric and/or historical artifacts, objects, or features) and protection of all archaeological resources during construction. SCE shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of cultural materials. All personnel shall be instructed that unauthorized removal or collection of artifacts is a violation of State law. Any excavation contract (or contracts for other activities that may have subsurface soil impacts) shall include clauses that require construction personnel to attend the Workers' Environmental Training Program so they are aware of the potential for inadvertently exposing buried archaeological deposits. SCE shall provide a background briefing for supervisory construction personnel describing the potential for exposing cultural resources, the location of any potential ESA and anticipated procedures to treat unexpected discoveries.</p>	<p>Prior to construction, all construction personnel to be trained regarding the recognition of possible buried cultural resources (i.e., prehistoric and/or historical artifacts, objects, or features) and protection of all archaeological resources during construction.</p> <p>Training requirements detailed in MM</p>	
<p><b>CL-1d:</b> Conduct cultural monitoring during construction</p>	<p><b>Conduct construction monitoring.</b> Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historic and prehistoric resources that could be encountered within the Proposed Project area. Monitoring shall occur in all areas of ground-disturbing activity that occur within 100 feet of a cultural resource ESA. The qualifications of the principal archaeologist and cultural resource monitors shall be approved by the CPUC and BLM. As specified in the CRMP, intermittent monitoring may occur in areas of moderate archaeological sensitivity at the discretion of the principal archaeologist, as identified in the CRMP. Copies of monitoring reports shall be submitted to the CPUC/BLM on a weekly basis.</p> <p>A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with Native American tribes. SCE shall retain and schedule any required Native American monitors.</p>	<p>Qualified and approved archaeological monitors to monitor construction.</p> <p>Follow the CRMP and provide weekly monitoring reports.</p> <p>Use Native American monitors where specified by BLM.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>CL-2a:</b> Treatment of previously unidentified resources	<b>Treat previously unidentified cultural resources.</b> If previously unidentified cultural resources are unearthed during construction activities, construction work in the immediate area of the find shall be halted and directed away from the discovery until a qualified archaeologist assesses the potential significance of the resource. Once the find has been inspected and a preliminary assessment made, SCE will consult with the CPUC and BLM to make the necessary plans for evaluation and treatment of the find(s).	When unidentified resources unearthed, cease construction until archaeologist assessed significance of resource.	
<b>CL-2b:</b> Treatment of human remains	<b>Properly treat human remains.</b> SCE shall follow all State and federal laws, statutes, and regulations that govern the treatment of human remains. Avoidance and protection of inadvertent discoveries which contain human remains shall be the preferred protection strategy with complete avoidance of impacts to such resources protected from direct project impacts by project redesign.  If human remains are discovered during construction, all work shall be diverted from the area of the discovery and the BLM authorized officer and CPUC shall be informed immediately. If the remains are on federal land, the remains shall be treated in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). If the remains are not on federal land, the remains shall be treated in accordance with Health and Safety Code Section 7050.5, CEQA Section 15064.5(e), and Public Resources Code Section 5097.98. SCE shall assist and support the CPUC and BLM, as appropriate, in all required NAGPRA and Section 106 actions, government to-government and consultations with Native Americans, agencies and commissions, and consulting parties as requested by the CPUC or BLM. SCE shall comply with and implement all required actions and studies that result from such consultations.	Follow requirements governing treatment of human remains.  Requires immediate notifications.	
<b>Geology &amp; Soils</b>			
<b>Hazards &amp; Hazardous Materials</b>			
<b>HH-1a:</b> Hazardous Materials and Waste Management	<b>Prepare a Hazardous Materials and Waste Management Plan.</b>	SCE to implement Hazardous Materials Waste Management Plan	
<b>HH-2a:</b> Soil management	<b>Prepare a Soil Management Plan.</b>	SCE to implement Soil Management Plan	
<b>HH-3a:</b> Identification of pesticide/herbicide contamination	<b>Identify pesticide/herbicide contamination.</b> [Partial MM text] Excavated project materials containing elevated levels of pesticide or herbicide will require special handling and disposal procedures consistent with the requirements of Mitigation Measure HH-2a (Prepare a soils management plan). In the event pesticide or herbicide contamination is found, CPUC/BLM shall be notified of the event and shall be kept apprised of the steps taken to address the problem.	Prior to construction, soil samples to be collected in areas with historic or current agricultural use and that will be disturbed by the project.	
<b>Land Use</b>			
<b>LU-1a:</b> Construction notification plan	<b>Prepare construction notification plan.</b>	SCE to implement Construction Notification Plan	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Mineral Resources</b>			
<b>MR-1a:</b> Coordinate with quarry operations  <i>MM MR-1a                      supersedes APM                      MIN-1</i>	<b>Coordinate with quarry operations.</b>	SCE to implement plan to avoid or minimize interference with mining operations	
<b>Noise</b>			
<b>N-1a:</b> BMPs for construction noise management	<b>Implement best management practices for construction noise.</b> SCE shall employ the following noise-control techniques, at a minimum, to reduce construction noise exposure at noise-sensitive receptors and to avoid possible violations of local rules, standards, and ordinances during construction: <ul style="list-style-type: none"> <li>▪ Construction noise shall be confined to daytime, weekday hours (7:00 a.m. to 6:00 p.m.) or an alternative schedule developed by SCE based on its coordination with the local jurisdiction.</li> <li>▪ Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.</li> <li>▪ Stationary noise sources (e.g., generators, pumps) at staging areas and on the ROW within 1,400 feet of sensitive receptors shall be shielded at the source to the extent feasible. Examples of feasible shielding include an enclosure, temporary sound walls, or acoustic blankets. For best performance, sound walls or acoustic blankets shall have a height of no less than 8 feet, a Sound Transmission Class (STC) of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutouts.</li> <li>▪ Construction traffic and helicopter flight shall be routed away from residences and schools, where feasible.</li> <li>▪ Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible, such that if a vehicle is not required for use immediately or continuously for safe construction activities, its engine should be shut off.</li> </ul>	Construction noise confined to daytime, weekday hours (7:00 a.m. to 6:00 p.m.) unless alternative schedule is based on coordination with local jurisdiction.  Noise reduction features must be as effective as original equipment.  Noise sources within 1,400 feet of sensitive receptors to be shielded at the source.  Helicopters routed away from residences and schools.  Vehicle idling to be minimized.	
<b>N-1b:</b> Helicopter noise	<b>Implement a helicopter noise control strategy.</b> As part of the final Helicopter Use Plan, SCE shall include a helicopter noise control strategy that identifies the established helicopter flight corridors and minimum transit elevations above ground level to avoid noise-sensitive receptors on the ground. The noise control strategy shall prohibit helicopter hovering (greater than 15 minutes) within 250 feet of residences in any vertical or horizontal direction.	SCE to implement Helicopter Use Plan  Hovering greater than 15 minutes within 250 feet of residences prohibited.	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Paleontological Resources (NOTE: APM PAL-1 has been superseded by the following mitigation measures.)</b>			
<p><b>PAL-1a:</b> Inventory and evaluate paleontological resources.</p>	<p><b>Inventory and evaluate paleontological resources.</b> Prior to construction and all other surface-disturbing activities, the Applicant shall have conducted and submitted an inventory of significant paleontological resources within the Proposed Project area. The report shall be based on the paleontological field reconnaissance surveys (conducted by PaleoSolutions, February 2012 to April 2013).</p> <p>If any changes are made to the extent or alignment of the Proposed Project subsequent to the completed field surveys, then additional field surveys shall be conducted within new project areas. The additional field surveys shall be conducted in areas identified as having moderate, undetermined, or high paleontological resource potential. The purpose of the field survey is to visually inspect the ground surface for exposed fossils and to evaluate geologic exposures for their potential to contain preserved fossil material at the subsurface. Field surveys shall be conducted in all areas of potential ground disturbance, outside of the previously surveyed potential impact areas.</p> <p>As part of the inventory report, the paleontological sensitivity rankings of geologic units examined in the field shall be evaluated using the BLM's (2008) PFYC System and refined based on the results of the pedestrian surveys. The report shall be submitted to the CPUC and BLM for review at least 60 days before the start of construction, and shall be modified in response to agency comments, with the final report completed at least 30 days before the first ground disturbance.</p>	<p>Prior to construction and other surface-disturbing activities, SCE to inventory significant paleontological resources in project area.</p> <p>Areas not previously surveyed are to be surveyed.</p>	
<p><b>PAL-1a:</b> Inventory and evaluate paleontological resources.</p>	<p><b>Inventory and evaluate paleontological resources. [Partial MM text]</b> Prior to construction and all other surface-disturbing activities, the Applicant shall have conducted and submitted an inventory of significant paleontological resources within the Proposed Project area. The report shall be based on the paleontological field reconnaissance surveys (conducted by PaleoSolutions, February 2012 to April 2013).</p> <p>If any changes are made to the extent or alignment of the Proposed Project subsequent to the completed field surveys, then additional field surveys shall be conducted within new project areas. The additional field surveys shall be conducted in areas identified as having moderate, undetermined, or high paleontological resource potential. The purpose of the field survey is to visually inspect the ground surface for exposed fossils and to evaluate geologic exposures for their potential to contain preserved fossil material at the subsurface. Field surveys shall be conducted in all areas of potential ground disturbance, outside of the previously surveyed potential impact areas.</p>	<p>SCE to implement pre-disturbance inventories.</p>	
<p><b>PAL-1b:</b> Paleontological Resource Mitigation and Monitoring Plan</p>	<p><b>Develop Paleontological Resource Mitigation and Monitoring Plan.</b></p>	<p>SCE to implement Paleontological Resources Mitigation and Monitoring Plan</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>PAL-1c:</b> Paleontological training of construction personnel</p>	<p><b>Train construction personnel.</b> Prior to the initiation of construction, all construction personnel shall be trained regarding the recognition of possible subsurface paleontological resources and protection of all paleontological resources during construction. The Applicant shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of paleontological materials. Training shall inform all construction personnel that Environmentally Sensitive Areas (ESAs) may include areas determined to be paleontologically sensitive. The ESAs must be avoided and travel and construction activity must be confined to designated roads and areas. All personnel shall be instructed that unauthorized collection or disturbance of protected fossils on or off the right-of-way by the Applicant, his representatives, or employees will not be allowed. Violators will be subject to prosecution under the appropriate State and federal laws and violations will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. The following issues shall be addressed in training or in preparation for construction:</p> <ul style="list-style-type: none"> <li>▪ The Applicant shall provide a background briefing for supervisory personnel describing the potential for exposing paleontological resources, the location of any potential ESAs, and procedures and notifications required in the event of discoveries by project personnel or paleontological monitors. Supervisory personnel shall enforce restrictions on collection or disturbance of fossils.</li> <li>▪ Upon discovery of paleontological resources by paleontologists or construction personnel, work in the immediate area of the find shall be halted and the Applicant's paleontologist notified. Once the find has been inspected and a preliminary assessment made, the Applicant's paleontologist will notify the BLM and CPUC and proceed with data recovery in accordance with the approved Plan consistent with Mitigation Measure PAL-1b (Develop Paleontological Resource Mitigation and Monitoring Plan).</li> </ul>	<p>Prior to construction, construction personnel to be trained on recognition and protection of possible paleontological resources.</p> <p>Topics to be addressed in training are listed in MM.</p>	



**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>PAL-1d:</b> Paleontology monitoring</p>	<p><b>Monitor construction for paleontological resources.</b> Based on the paleontological sensitivity assessment and Paleontological Resource Mitigation and Monitoring Plan consistent with Mitigation Measure PAL-1b (Develop Paleontological Mitigation and Monitoring Plan), the Applicant shall conduct full-time construction monitoring through its qualified paleontological monitor in areas determined to have moderate (PFYC 3a) to very high (PFYC 5) sensitivity. Sediments of unknown (PFYC 3b) sensitivity shall be monitored by a qualified paleontological monitor on a part-time basis (as outlined in the Plan). Geologic Units with very low (PFYC 1) or low (PFYC 2) sensitivity shall not be monitored. Monitoring will entail the visual inspection of excavated or graded areas and trench sidewalls. In the event that a paleontological resource is discovered, the monitor will have the authority to temporarily halt the construction equipment around the find until it is assessed for scientific significance, and collected. A temporary construction exclusion zone (i.e., environmentally sensitive area [ESA]) of at least 50 feet, consisting at a minimum of lath and flagging tape, will be erected around the discovery. The exclusion zone acts as a buffer around the discovery and is maintained for safety. SCE will report the discovery to the CPUC and BLM within 24 hours and/or as outlined in the Plan. Construction activities can occur outside the buffer if it is safe to do so. The size of the buffer may be increased or decreased once the monitor adequately explores the discovery to determine its size and significance. If indicators of potential microvertebrate fossils are found, screening of a test sample shall be carried out as outlined in SVP 2010. This procedure will be outlined in the Plan.</p> <p>Paleontological resource monitors per SVP (2010) shall have the equivalent of the following qualifications:</p> <ul style="list-style-type: none"> <li>▪ BS or BA degree in geology or paleontology and one year experience monitoring in the state or geologic province of the specific project. An associate degree and/or demonstrated experience showing ability to recognize fossils in a biostratigraphic context and recover vertebrate fossils in the field may be substituted for a degree. An undergraduate degree in geology or paleontology is preferable, but is less important than documented experience performing paleontological monitoring, or</li> <li>▪ AS or AA in geology, paleontology, or biology and demonstrated two years of experience collecting and salvaging fossil materials in the state or geologic province of the specific project, or</li> <li>▪ Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in the state or geologic province of the specific project.</li> <li>▪ Monitors must demonstrate proficiency in recognizing various types of fossils, in collection methods, and in other paleontological field techniques</li> </ul> <p>Copies of Monitoring Reports shall be submitted to the CPUC/BLM on a weekly basis.</p>	<p>SCE to conduct construction monitoring based on Paleontological Mitigation and Monitoring Plan.</p> <p>Actions to be taken are listed in the MM, including establishing ESAs. Qualifications of monitor are specified.</p>	
<p><b>PAL-1e:</b> Reporting and curation</p>	<p><b>PAL-1e: Final reporting and curation.</b> At the conclusion of laboratory work and museum curation, a final report will be prepared describing the results of the paleontological monitoring efforts associated with the project. The report will include a summary of the field and laboratory methods, an overview of the Proposed Project area geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, then a copy of the report will also be submitted to the designated museum repository.</p> <p>All significant fossils collected will be prepared in a properly equipped paleontology laboratory to a point ready for curation no more than 60 days after all analyses are completed. Preparation will include the careful removal of excess matrix from fossil materials and stabilizing and repairing specimens, as necessary. Following laboratory work, all fossils specimens will be identified to the lowest taxonomic level, cataloged, analyzed, and delivered to an accredited museum repository for permanent curation and storage. The cost of curation is assessed by the repository and is the responsibility of the Applicant.</p>	<p>At the conclusion of laboratory work and museum curation, a final report will be prepared describing the results of the paleontological monitoring efforts.</p> <p>Significant fossils collected are to be prepared for curation within 60 days after al analyses are completed.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Recreation (NOTE: APMs REC-1 and REC-2 have been superseded by the following mitigation measures.)</b>			
<b>R-1a:</b> Coordinate construction with recreation area representatives	<p><b>Coordinate construction schedule and activities with a representative for the recreation area.</b> No less than 30 days prior to construction that would affect recreation areas, SCE shall coordinate construction activities and the project construction schedule with a representative of the recreation areas listed below. SCE shall use best efforts to schedule construction activities to avoid heavy recreational use periods, including major holidays, in coordination with the representative. If SCE is unable to accommodate this avoidance, it will notify the CPUC and BLM as to the dates and reasons they are not able to comply. SCE shall locate construction equipment to avoid temporary preclusion of recreation area use whenever feasible per the recommendations of the representative. SCE shall also prepare a public notice of construction activities consistent with Mitigation Measure LU-1a (Prepare Construction Notification Plan). SCE shall document its coordination efforts with the representative, and provide this documentation to the CPUC and the BLM 30 days prior to construction.</p> <ul style="list-style-type: none"> <li>▪ Rancho Mediterraia Park</li> <li>▪ South Hills Preserve</li> <li>▪ Lillian V. Miller Memorial Trail</li> <li>▪ Rest areas</li> <li>▪ Stetson Community Park</li> <li>▪ Noble Creek Regional Park</li> <li>▪ Trevino Community Park</li> <li>▪ Bike lane on Barton Road, Beaumont Avenue, Drainage and SCE Corridor Class I path, Cherry Avenue</li> <li>▪ Norton Younglove Preserve</li> <li>▪ San Timoteo Canyon State Park</li> <li>▪ Cherry Valley Lakes RV Campground</li> <li>▪ Oak Valley Golf Club and Park</li> <li>▪ Pacific Crest Trail</li> </ul>	<p>At least 30 days prior to construction that affects recreation areas, coordinate with representatives of the recreation areas. Provide documentation of coordination to CPUC/BLM.</p> <p>Avoid heavy use periods and major holidays, or explain reasons they cannot be avoided.</p> <p>Provide public notice of construction.</p>	
<b>R-1b:</b> Identify alternative recreation areas	<p><b>Coordinate with local agencies to identify alternative recreation areas.</b> SCE shall coordinate with the local parks and recreation departments regarding construction activities at the park and recreation facilities listed in R-1a, in order to identify alternative recreation sites that may be used by the public. SCE shall post a public notice at recreation facilities to be closed or have limited access during construction consistent with Mitigation Measure LU-1a (Prepare Construction Notification Plan) as allowed by the facility representative and identify any alternative recreation sites. SCE shall document its coordination with the parks and recreation departments and shall submit this documentation to the CPUC and the BLM 30 days prior to initiating project construction.</p>	<p>SCE to coordinate with local recreation departments to identify alternative recreation sites.</p> <p>Post a public notice of facilities to be closed or with limited access during construction. Provide documentation of coordination to CPUC/BLM</p>	
<b>R-1c:</b> Temporary detour for Pacific Crest National Scenic Trail users	<p><b>Provide a temporary detour for Pacific Crest National Scenic Trail users.</b> No less than 60 days prior to construction affecting the PCT, SCE shall coordinate with the USFS to establish a temporary detour of the trail during trail closure to avoid hazardous construction areas. SCE shall prepare a public notice of the temporary trail closure and information on the trail detour consistent with Mitigation Measure L-1a (Prepare Construction Notification Plan). SCE shall document its coordination efforts with the USFS and submit this documentation to the CPUC and the BLM 30 days prior to construction.</p>	<p>At least 60 days before construction affecting PCT, coordinate with USFS to establish temporary detour. Prepare public notice. Document to CPUC/BLM 30 days prior to construction.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Transportation &amp; Traffic</b>			
<b>T-1a:</b> Construction Transportation Plan	<p><b>Prepare Construction Transportation Plan.</b> Where construction traffic has the potential to significantly affect regional and local roadways by generating additional vehicle trips, SCE shall prepare a Construction Transportation Plan (CTP) describing timing of commutes, methods of reducing crew-related traffic, and other methods for reducing construction-generated additional traffic on regional and local roadways. The CTP also shall require construction workers to park personal vehicles at yards or designated assembly points and carpool to work locations in order to limit the number of construction-related vehicles on the road. At construction sites, vehicles shall be required to park within the project ROW or approved disturbance areas or on access roads to the maximum extent possible. Parking shall not be permitted in areas with dry vegetation that could pose a fire hazard. SCE shall submit the CTP to Caltrans and the affected local jurisdictions for review and approval at least 30 days prior to commencing construction activities.</p> <p>At least 15 days prior to construction, SCE shall provide a letter or email to CPUC and BLM confirming that the mitigation measure has been executed and shall provide a copy of the final CTP. This communication shall identify persons or agencies contacted, contact information, and the date of contact, and shall summarize discussions and/or agreements reached, if any.</p>	SCE to implement Construction Transportation Plan	
<b>T-1b:</b> Traffic Control Plans	<p><b>Prepare Traffic Control Plans.</b> [Partial MM text] Prior to the start of construction and as part of the required traffic encroachment permits, SCE shall submit Traffic Control Plans (TCPs) to agencies with jurisdiction over the public roads that would be affected by overhead or underground construction. ....</p> <p>Copies of the TCPs shall be provided to the CPUC, BLM, Caltrans, the planning or traffic departments of the affected local jurisdictions, and all affected police departments, fire departments, and ambulance and paramedic services. Documentation of coordination with service providers shall be provided to the CPUC and BLM at least 30 days prior to the start of construction.</p>	SCE to implement Traffic Control Plans	
<b>T-1c:</b> Restrict lane closures	<p><b>Restrict lane closures.</b> To minimize traffic congestion and delays during construction, SCE shall restrict all necessary lane closures or obstructions on major roadways (as designated by applicable County and City General Plans) associated with overhead construction activities to off-peak traffic periods. Unless absolutely necessary, lane closures must not occur between the peak hours of 6:00 and 9:00 a.m. and 3:30 and 6:30 p.m., or as directed in writing by the affected public agency in the encroachment permit</p>	Lane closures to occur during off-peak hours unless otherwise directed.	
<b>T-1d:</b> Disruption of bus and transit service	<p><b>Minimize disruption of bus and transit service.</b> SCE shall coordinate with local and regional agencies or organizations providing regular bus or transit service in the project area at least 30 days prior to construction to reduce potential interruption of these services. At least 15 days prior to construction, SCE shall provide a letter or email to CPUC and BLM confirming that the mitigation measure has been executed. This communication shall identify persons or agencies contacted, contact information, and the date of contact, and shall summarize discussions and/or agreements reached, if any.</p>	SCE to coordinate with bus/transit service providers in areas to be affected by construction at least 30 days prior, and confirm to CPUC/BLM that MM has been implemented at least 15 days prior to work.	
<b>T-1e:</b> Pedestrian and bicycle safety	<p><b>Ensure pedestrian and bicycle circulation and safety.</b> Where construction will result in temporary closures of sidewalks or other pedestrian facilities, SCE shall provide temporary pedestrian access, through detours or safe areas along the construction zone. Where construction activity will result in bike route or bike path closures, appropriate detours shall be established, and detour signs shall be posted. Detours and closures required for safe pedestrian and bicycle access through or around the construction area shall be identified in a circulation plan included in the TCP's required under Mitigation Measure T-1b. All detours and related signage shall be consistent with the standard guidelines outlined in the U.S. Department of Transportation's Manual on Uniform Traffic Control Devices (MUTCD).</p>	SCE to provide temporary pedestrian and bicyclist access, along the construction zone through detours or safe areas, as identified in the TCP.	

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>T-1f:</b> Access to property</p>	<p><b>Provide access to property.</b> When construction activities block access to a property and the property includes a residence or business, SCE shall work with the property owner, tenant, or business owner to provide reasonable alternate access. If construction involves trenching across or in front of the property's point of access and alternative access is not available, SCE shall lay a temporary steel plate trench bridge as needed and upon request in order to ensure access when not actively constructing at the affected location.</p>	<p>SCE to provide reasonable alternative access to properties blocked by construction.</p>	
<p><b>T-3a:</b> Avoid conflicts with planned transportation improvements</p>	<p><b>Avoid conflicts with planned transportation improvements.</b> Prior to final project design, SCE shall review project plans with Caltrans and local traffic departments or public works departments of the counties and the individual cities through which the proposed transmission route would pass. The review will be conducted to identify planned transportation projects potentially affected, to ensure that Project structures are placed to avoid conflict with any planned transportation projects, and to inform the jurisdictions of the timing and location of any trenching or boring that may affect road surfaces and the flow of traffic. If there are conflicts they shall be addressed through mutual agreement of SCE and the jurisdiction.</p> <p>At least 15 days prior to construction, SCE shall provide a letter or email to CPUC and BLM confirming that the mitigation measure has been executed. This communication shall identify persons or agencies contacted, contact information, and the date of contact, and shall summarize discussions and/or agreements reached.</p>	<p>SCE to review project plans with Caltrans and traffic/public works departments.</p> <p>At least 15 days prior to construction, confirm to CPUC/BLM that MM has been executed.</p>	
<p><b>T-4a:</b> Repair road damage caused by construction activities</p>	<p><b>Repair roadways damaged by construction activities.</b> If roadways, sidewalks, medians, curbs, shoulders, or other such features are damaged by the project's construction activities, as determined by the affected public agency, such damage shall be repaired and streets restored to their pre-project condition by SCE. Prior to construction, SCE shall confer with agencies having jurisdiction over the roads anticipated to be used by delivery vehicles and equipment. Unless an alternative method for determining roadway condition is required by a given jurisdiction, at least 30 days prior to construction, SCE shall photograph or video record all construction route public roads within 500 feet in each direction of project access points (i.e., locations where vehicles leave public roads to reach project sites) and roadways where the road surface will be damaged by project-related trenching or digging, and shall provide the respective local jurisdictions, CPUC, BLM, and Caltrans (if applicable) with a copy of these images.</p> <p>At least 15 days prior to construction, SCE shall provide a letter or email to CPUC and BLM confirming that the mitigation measure has been executed. This communication shall identify persons or agencies contacted, contact information, and the date of contact, and shall summarize discussions and/or agreements reached.</p> <p>At the end of major construction, SCE shall coordinate with each affected jurisdiction to confirm what repairs would be required. Any damage shall be repaired to the pre-construction condition within 60 days from the end of all construction, or on a schedule mutually agreed to by SCE and the jurisdiction. SCE shall provide CPUC and BLM confirming documentation when the coordination has been completed and when the repairs have been completed.</p>	<p>At least 30 days prior to construction, SCE to confer with jurisdiction on roads to be use and, unless alternative method of determining existing road condition is required, photograph or video record construction route public roads within 500 feet of project access points.</p> <p>Provide affected jurisdiction, CPUC, BLM, and Caltrans copies of images.</p> <p>At least 15 days before construction, confirm to CPUC/BLM MM has coordination occurred.</p> <p>After construction, SCE to confirm toe CPUC/BLM repairs have been completed.</p>	
<p><b>T-5a:</b> Obtain need approvals from railroads</p>	<p><b>Obtain required permits or approvals for crossing or working in railroad rights-of-way.</b> SCE shall obtain permits/approvals from affected railway operators (Union Pacific Railroad and Burlington Northern Santa Fey Railway) to ensure that project construction activities in the rail ROW comply with each company's safety requirements and to avoid disruption to rail traffic. Copies of required permits or approvals shall be submitted to the CPUC and BLM prior to construction in or across rail ROWs.</p>	<p>SCE to obtain permits/approvals to work in rail ROW.</p> <p>Copies of permits/approvals to be submitted to CPUC/BLM</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>T-6a:</b> Notification of temporary loss of parking	<b>Notify public of short-term elimination of public parking spaces.</b> As required in Mitigation Measure LU-1a, prior to construction activity on major roadways, using media such as local newspapers and on-site postings, SCE shall notify the public of the potential for public parking spaces to be temporarily eliminated and identify where temporary parking spaces would be located. This requirement shall apply when more than five parking spaces are affected. The elimination of parking and location of alternative parking must be in conformance with the requirements of agencies responsible for parking management.	SCE to publicize where more than 5 parking spaces are affected by construction and identify alternative temp parking.	
<b>T-7a:</b> Final Helicopter Use Plan  <i>MM T-7a supersedes APM TRANS-1</i>	<b>T-7a: Prepare and implement a final helicopter use plan.</b>	SCE to implement approved Helicopter Use Plan	
<b>T-8a:</b> FAA review and approval of structures and spans	<b>Obtain FAA review and approval of all structures and spans posing potential aircraft safety hazards.</b> SCE shall submit the required forms and information to FAA for its review and approval of transmission structures and conductor spans that may require installation of safety devices or other restrictions. Copies of FAA's review and approval shall be provided to CPUC and BLM at least 60 days prior to erection of structures or installation of conductors that would be in violation of FAA standards and requirements. These structures and spans shall be identified to CPUC and BLM, and the planned installation of required lighting and marker balls described.	At least 60 days prior to erection of structures or installing conductor that may require FFA review/approval, provide CPUC/BLM copies of FAA's review/approval and describe planned installation of lights/balls.	
<b>Utilities and Public Services</b>			
<b>Visual Resources</b>			
<b>VR-1a:</b> Screening of construction from view	<b>Screen construction activities from view.</b> Construction yards, staging areas, and material and equipment storage areas shall be visually screened using temporary screening fencing. Fencing will be of an appropriate structure, material, and color for each specific location. This requirement shall not apply if SCE can demonstrate that construction yards are located away from areas of high public visibility including public roads, residential areas, and public recreational facilities. For any site that SCE proposes to exempt from the screening requirement, SCE shall define the site on a detailed map demonstrating its visibility from nearby roads, residences, or recreational facilities to the CPUC and BLM for review and approval at least 60 days prior to the start of construction at that site.	Yards, staging areas, and storage areas to be visually screened unless SCE demonstrates they are not highly visible.  For exemptions, SCE to identify sites on maps demonstrating visibility and provide to CPUC/BLM at least 60 days prior to start of construction	



**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VR-2a:</b> Minimize vegetation removal and ground disturbance</p>	<p><b>Minimize vegetation removal and ground disturbance.</b> Only the minimum amount of vegetation necessary for the construction of structures and facilities shall be removed during construction. At the structure locations defined in Table D.18-11, structure and access road scars may be highly visible when located on hill slopes and along ridges, or when visible from elevated vantage points. In order to reduce visual impacts, the boundaries of all areas to be disturbed at the locations defined in Table D.18-11 shall be delineated consistent with the requirements of Biological Resources Mitigation Measure VEG-1c. Staking shall define staging areas, access roads, spur roads, tower locations, pulling sites, and sites for temporary placement of spoils. Stakes and flagging shall be installed before construction and in consultation with the Project Biologist and the CPUC/BLM Environmental Monitor or Visual Specialist. Areas staked shall be as small as possible in order to minimize the visibility of ground disturbance from sensitive viewing locations such as roads, trails, residences, and recreation facilities and areas. Parking areas and staging and disposal site locations shall be similarly located in areas approved by the Project Biologist and CPUC/BLM’s Environmental Monitor or Visual Specialist prior to the start of construction. All disturbances by Proposed Project vehicles and equipment shall be confined to the staked and flagged areas.</p>	<p>Refer to Table D.18-11 (at end of this table) for applicable locations.</p> <p>Areas are to be as small as possible and boundaries clearly delimited.</p>	
<p><b>VR-3a:</b> Reduce color contrast</p>	<p><b>Reduce color contrast of retaining walls, land scars, and graveled surfaces.</b> Where construction would unavoidably create land scars or retaining walls visible from sensitive public viewing locations (as defined in Table D.18-11), disturbed soils and new walls shall be treated with an appropriate color or material (Natina Concentrate, Eonite, or Permeon, or similar). The material shall be approved by the CPUC and BLM, and the intent shall be to reduce the visual contrast created by the lighter-colored disturbed soils and rock with the darker soil and vegetated surroundings. SCE shall consult with the CPUC and BLM and/or their authorized representative(s) on a site-by-site basis and obtain written approval prior to the use of any colorants.</p>	<p>Refer to Table D.18-11 (at end of this table) for applicable locations.</p> <p>Surface color treatments to be approved by CPUC/BLM based on sit-by-site consultation.</p>	
<p><b>VR-4a:</b> Views of retaining walls and land scars</p>	<p><b>Minimize in-line views of retaining walls and land scars.</b> In its final Project design, SCE shall incorporate design features that reduce the in-line visibility of all access and spur roads, retaining walls, and ground disturbance areas at the locations defined in Table D.18-11. These design features include alternative access and spur road routes, the use of “drive and crush” access, and redesign and placement of retaining walls to reduce the need for new roads and retaining walls and to reduce or eliminate the in-line visibility of these facilities. SCE’s final design shall document the process used to minimize visibility of the access roads or other visible road features and shall include the following:</p> <ul style="list-style-type: none"> <li>▪ Vegetation that would be affected and steepness of terrain for consideration of vegetation and erosion impacts.</li> <li>▪ Areas where “drive and crush” access is a feasible measure to avoid access road scars (i.e., no grading or vegetation removal is required). SCE shall define frequency of driving, vehicle types to be used, and likelihood of vegetation recovery.</li> <li>▪ This documentation shall be provided to the CPUC/BLM at least 90 days prior to the start of construction.</li> </ul>	<p>Refer to Table D.18-11 (at end of this table) for applicable locations.</p> <p>At least 90 days prior to construction, provide CPUC/BLM documentation on how reduced in-line visibility of retaining walls and land scars is achieved.</p>	
<p><b>VR-5a:</b> Marking of natural features</p>	<p><b>Prohibit construction marking of natural features.</b> SCE shall not apply paint or permanent discoloring agents to rocks or vegetation to indicate survey or construction activity limits or for any other purpose. This measure does not apply to temporary marking agents used to identify underground utilities.</p>	<p>Natural features shall not be painted or discolored except for temporary marking of underground utilities</p>	
<p><b>VR-7a:</b> Minimizing night lighting</p>	<p><b>Minimize night lighting at project facilities.</b> SCE shall avoid night lighting where possible and minimize its use under all circumstances. To ensure this, SCE shall prepare a Night Lighting Management Plan for both construction and operation, incorporating the following general principles and specifications:</p> <ul style="list-style-type: none"> <li>▪ Use of portable truck-mounted lighting.</li> <li>▪ Emphasis on use of low-pressure sodium (LPS) or amber light-emitting diode (LED) lighting.</li> <li>▪ White lighting (metal halide) would: a) only be used when necessitated by specific work tasks; b) would not be used for dusk-to-dawn lighting; and c) would be less than 3500 Kelvin color temperature.</li> </ul>	<p>SCE to prepare and provide a Night Lighting Management Plan applicable to both construction and operation of the project.</p> <p>Night lighting is to be avoided or minimized.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<ul style="list-style-type: none"> <li>▪ All lamp locations, orientations, and intensities including security, roadway, and task lighting.</li> <li>▪ Each light fixture and each light shield.</li> <li>▪ Total estimated outdoor lighting footprint expressed as lumens or lumens per acre.</li> <li>▪ Detailed list of anticipated circumstances and activities that would require night lighting including the expected frequency of the activity, the duration of the activity, and the expected amount of lighting that would be necessary for that activity.</li> <li>▪ Light fixtures that could be visible from beyond project facility boundaries shall have cutoff angles sufficient to prevent lamps and reflectors from being visible beyond the project facility boundary, including security lighting.</li> <li>▪ Motion sensors and other controls to be used, especially for security lighting such that lights operate only when the area is occupied.</li> <li>▪ Surface treatment specification that will be employed to minimize glare and sky glow. The Night Lighting Management Plan shall also consider the following factors:               <ul style="list-style-type: none"> <li>▪ All temporary construction lighting and permanent exterior lighting shall include:                   <ul style="list-style-type: none"> <li>(a) lamps and reflectors that are not visible from beyond the construction site or facility including any off-site security buffer areas;</li> <li>(b) lighting that shall not cause excessive reflected glare;</li> <li>(c) direct lighting that shall not illuminate the nighttime sky, except for required FAA aircraft safety lighting (which, if required, shall be an on-demand, audio-visual warning system that is triggered by radar technology);</li> <li>(d) minimization of illumination of the Proposed Project and its immediate vicinity;</li> <li>(e) creation of sky glow caused by project lighting shall be avoided;</li> <li>(f) compliance with local policies and ordinances to be outlined in the Night Lighting Management Plan. All permanent light sources shall be below 3,500 Kelvin color temperature (warm white) and shall be full cutoff fixtures.</li> </ul> </li> </ul> </li> <li>▪ Always-on security lighting is to be limited to one low-wattage, fully shielded, full cutoff light fixture at the main entrance to facilities. All other security lighting is to be motion activated only through the use of passive infrared sensors and controlled as specific zones such that only targeted areas are illuminated. No other lighting is to be utilized on a nightly basis when a facility is not occupied.</li> <li>▪ Lighted nighttime maintenance is to be minimized or avoided as a routine practice and should occur only during emergencies.</li> </ul> <p>The draft Night Lighting Management Plan shall be submitted to the CPUC and BLM at least 60 days prior to the start of construction. Following the BLM's and CPUC's review of the draft plan, and at least 15 days prior to the start of construction, SCE shall submit to the CPUC and BLM for review and approval, a final Night Lighting Management Plan. Construction activities shall not start until CPUC's and BLM's approvals of the plan have been received.</p>	<p>At least 60 days prior to construction, submit the draft NLMP to CPUC/BLM.</p> <p>At least 15 days prior to construction, submit final NLMP.</p> <p>Construction activities to not start until CPUC/BLM approvals of the plan have been received.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VR-8a:</b> Minimize color contrast</p>	<p><b>Minimize visual contrast in project design.</b> In the final design of approved project structures in locations identified in the Final EIR (pages D.18-62, D.18-64) as having Class I impacts, SCE shall use design fundamentals that reduce the visual contrast of new structures and components to the characteristic landscape to the extent feasible. These include siting and location; reduction of visibility; repetition of form, line, color, and texture of the landscape; and reduction of unnecessary disturbance. SCE shall provide to the CPUC and BLM for review, a draft Project Design Plan describing the siting, placement, and other design considerations to be employed to minimize Proposed Project contrast. The plan must explain how the design will minimize visual intrusion and contrast by blending the earthwork, vegetation manipulation, and facilities with the landscape. Design strategies to address these fundamentals shall be based on the following factors.</p> <ul style="list-style-type: none"> <li>▪ <b>Earthwork.</b> Select locations and alignments that fit into the landforms to minimize the sizes of cuts and fills.</li> <li>▪ <b>Vegetation Manipulation.</b> Use existing vegetation to screen graded areas and facilities from public viewing to the extent feasible. Feather and thin the edges of cleared areas and retain a representative mix of plant species and sizes.</li> <li>▪ <b>Reclamation and Restoration.</b> Blend the disturbed areas into the characteristic landscape including access and spur roads and disturbed areas created during construction (transmission line structures, and construction yards and staging areas). Replace soil, brush, rocks, and natural debris over these disturbed areas. Newly introduced plant species shall be of a form, color, and texture that blend with the landscape.</li> </ul> <p>The Project Design Plan shall be submitted to CPUC and BLM at least 60 days prior to the start of construction. If the CPUC or BLM notifies SCE that revisions to the plan are needed before the plan can be approved, within 30 days of receiving that notification, SCE shall submit a revised plan. Once the plan is made final, SCE shall provide a copy as a courtesy to the incorporated cities and county jurisdiction where the significant visual impacts have been identified.</p>	<p>See FEIR page D.18-62, Impact VR-8. For structures identified as having Class 1 visual impacts, reduce the visual contrast with the landscape.</p> <p>At least 60 days prior to construction, provide CPUC/BLM a draft Project Design Plan describing methods to minimize contrast.</p> <p>If revisions to the plan are needed, within 30 days of notification provide a revised plan.</p> <p>Courtesy copies of final plan are to be provided to jurisdictions where significant visual impacts have been identified.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VR-9a:</b> Treatment of structure surfaces</p>	<p><b>Treat structure surfaces.</b> For locations of the project identified in the Final EIR (pages D.18-62, D.18-64) as having significant and unmitigable impacts (Class I), SCE shall treat the surfaces of all structures and new buildings visible to the public such that: a) their colors minimize visual contrast by blending with the characteristic landscape colors; and b) their colors and finishes do not create excessive glare. The transmission structures and conductors within these locations shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. SCE shall consider the use of special galvanizing treatments or post-manufacture application of chemical treatments (such as Natina Steel) to ensure that transmission structures are sufficiently dulled and non-reflective and are of the appropriate color to blend effectively with the surrounding landscape. SCE shall comply with CPUC and BLM requirements regarding appropriate surface treatments for Proposed Project elements.</p> <p>SCE shall provide to the CPUC and BLM for review, a draft Surface Treatment Plan describing the application of colors and textures to all new facility structures, buildings, walls, fences, and components comprising all facilities to be constructed within these locations. The draft Surface Treatment Plan must explain how the design will reduce glare and minimize visual intrusion and contrast by blending the facilities with the landscape. The draft plan shall be submitted to CPUC and BLM at least 60 days prior to ordering the first structures that are to be color-treated during manufacture or prior to construction of any of the facility components, whichever comes first. If the BLM or CPUC notifies SCE that revisions to the plan are needed before the plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised plan. The draft Surface Treatment Plan shall include the following components and specifications.</p> <ul style="list-style-type: none"> <li>▪ Specification, and 11" x 17" color simulations at life-size scale, of the treatment proposed for use on structures, including structures treated during manufacture.</li> <li>▪ A list of each major structure, building, tower and/or pole, and fencing specifying the color(s) and finish(es) proposed for each (colors must be identified by name and by vendor brand or a universal designation).</li> <li>▪ Two sets of brochures and/or color chips for each proposed color.</li> <li>▪ A detailed schedule for completion of the treatment.</li> <li>▪ A procedure to ensure proper treatment maintenance for the life of the Proposed Project.</li> <li>▪ Until SCE receives notification of approval of the Surface Treatment Plan by the CPUC and BLM, SCE shall not specify to the vendors the treatment of any buildings or structures for manufacture and shall not perform the final treatment on any buildings or structures treated on site. Additionally, construction activities shall not start until approval of the plan from the CPUC and BLM has been received. Within 14 days following the completion of treatment on any facility component, SCE shall notify the CPUC and BLM that the component (e.g., structure or building) is ready for inspection.</li> </ul>	<p>See FEIR page D.18-62, Impact VR-8. For structures identified as having Class 1 visual impacts, treat surface of structures to minimize color contrast and glare.</p> <p>At least 60 days prior to ordering structures to be color-treated during manufacture or to construction of any facility components, SCE to prepare and submit to CPUC/BLM a draft Surface Treatment Plan describing application of colors and textures to project elements.</p> <p>If revisions to the plan are needed, within 30 days of notification, SCE to submit revised plan.</p> <p>Until SCE receives notification of approval of the Surface Treatment Plan, SCE shall not specify to the vendors the treatment of any buildings or structures for manufacture and shall not perform the final treatment on any buildings or structures treated on site. Within 14 days following the completion of treatment on any facility component, SCE shall notify the CPUC and BLM that the component is ready for inspection.</p>	

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Water Resources &amp; Hydrology</b>			
<p><b>WR-2a:</b> Erosion control and water quality</p> <p><i>MM WR-2a supersedes APMs HYDRO-2 and HYDRO-3</i></p>	<p><b>Implement an Erosion Control Plan and demonstrate compliance with water quality permits.</b> [Partial MM text] SCE shall develop and submit an Erosion Control Plan to the CPUC and BLM at least 60 days prior to construction. The Erosion Control Plan may be part of the Stormwater Pollution Prevention Plan, and kept onsite and readily available on request. ....</p> <p>Locations requiring erosion control/SWPPP corrective actions/repairs shall be tracked, including dates of completion, and documented during inspections. Inspections and monitoring shall be performed in compliance with the Federal and California Construction General Permits. The inspection reports shall be maintained and kept in their respective SWPPP, kept on site as required by the Federal and State Construction General Permits, and made available to the RWQCB, CPUC, BLM, counties, local municipalities, and tribal governments, on request. Additionally, an Annual Report shall be filed for each reporting period in compliance with Federal and California Construction General Permit reporting requirements.</p> <p>SCE shall submit to the CPUC and BLM Grading Plans that define the locations of the specific features listed above.</p> <p>SCE shall submit to the CPUC and BLM evidence of possession of applicable required permits for the representative land disturbance prior to engaging in soil-disturbing construction/demolition activities. Such permits may include, but are not limited to, a CWA Section 402 NPDES California General Permit for Storm Water Discharges Associated with Construction Activities (General Permit) from the applicable Regional Water Quality Control Board(s) (RWQCBs), and the Federal General Permit for Storm Water Discharges Associated with Construction Activities on Tribal Land.</p> <p>Prior to ground disturbance in stream channels or other waters jurisdictional to the State of California or the Federal Government, SCE shall obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife, a Section 404 permit from the USACE, and a CWA Section 401 certification from the SWRCB.</p>	<p>SCE to implement Erosion Control Plan</p> <p>Locations requiring erosion control/SWPPP corrective actions/repairs shall be tracked, including dates of completion, and documented during inspections. Inspections and monitoring shall be performed in compliance with the Federal and California Construction General Permits.</p> <p>Grading Plans shall be submitted to CPUC/BLM defining locations of features in the ECP.</p> <p>Evidence that applicable permits have been acquired to be submitted to CPUC/BLM. Prior to disturbance in stream channels</p>	
<p><b>WR-3a:</b> Flood, erosion, and scour protection</p>	<p><b>Implement flood, erosion, and scour protection for aboveground and belowground improvements.</b> [Partial MM text] SCE shall evaluate and conform to NPDES MS4 Phase I and II requirements for post-construction BMPs and, in consultation with San Bernardino and Riverside Counties and applicable local jurisdictions and agencies, prepare or conform to existing Water Quality Management Plans where determined necessary.</p>	<p>SCE to implement flood, erosion, and scour protection</p>	
<p><b>APM HYDRO-1:</b> Maintain existing flow patterns</p>	<p><b>APM HYDRO-1:</b> Installation of drainage improvements would be designed to maintain the existing flow patterns as practicable.</p>	<p>As practicable, drainage will maintain existing flow patterns.</p>	
<b>Wildland Fire</b>			
<p><b>WF-1a:</b> Fire Management Plan</p>	<p><b>Prepare and implement a Fire Management Plan.</b> A Project-specific fire prevention plan for both construction and operation of the project shall be prepared by SCE and submitted to for review prior to initiation of construction. The draft copy of this Plan is to be provided to each fire agency at least 90 days before the start of any construction activities in areas designated as Very High or High Fire Hazard Severity Zones.</p>	<p>SCE to implement the Fire Management Plan</p>	
<b>Electrical Interference</b>			
<p><b>EIS-1a:</b> Conductor surface gradient</p>	<p><b>Limit the conductor surface gradient.</b> As part of the design and construction process for the project, SCE shall limit the conductor surface gradient in accordance with the Institute of Electrical and Electronic Engineers Radio Noise Design Guide.</p>		



**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
EIS-1b: Electronic interference	<b>Document and resolve electronic interference complaints.</b> After energizing the transmission line, SCE shall respond to, document, and resolve radio/television/electronic equipment interference complaints received. These records shall be made available to the CPUC and BLM for review upon request. All unresolved disputes shall be referred by SCE to the CPUC for resolution.	After energizing the line, SCE to document and resolve interference complaints.	
EIS-2a: Grounding	<b>Implement grounding measures.</b> As part of the siting and construction process, SCE shall identify objects (such as metal fences, metal buildings, and metal pipelines) within and near the right-of-way that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE's standards. The identification of objects shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.	SCE to identify metal objects that have potential for induced voltages and shall implement grounding.	

**Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a**

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
1	1W03, 1E03	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	M2-T5, M2-T5	Remove	
2	2N02	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	M39-T4	Remove	
	2N03	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	2N10	Proposed	
	M41-T1	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	2N11	Proposed	
	M41-T2	Remove	This elevated hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	2N12	Proposed	
	M41-T3	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the north and northeast.
	2N16	Proposed	
	M42-T1	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets (e.g., Prado Lane and Canyon Vista Drive) and residences to the northwest, north, and northeast.
	2N17	Proposed	
	M42-T2	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets (e.g., Prado Lane and Canyon Vista Drive) and residents to the northwest, north, east, and southeast.
	2N18	Proposed	
	M43-T3	Remove	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets (e.g., Prado Lane and Canyon Vista Drive) and residents to the northwest, north, east, and southeast.
2N23	Proposed		
M43-T2	Remove	This elevated hillslope location would be prominently visible to travelers on nearby public streets and residents to the northwest, north, and east.	
2N29	Proposed		

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

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<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
	M43-T6	Remove	This elevated hillslope location would be prominently visible to travelers on nearby public streets and residents to the north.
	2N32	Proposed	This elevated hillslope location would be prominently visible to travelers on the adjacent public roads (I-215 and S. Mt. Vernon Ave.) and a retail complex.
	M44-T3	Remove	
3	3S01	Modify	This elevated hillslope location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M89-T1	Remove	
	3S02	Proposed	This elevated hilltop location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M29-T2	Remove	
	M89-T2	Remove	
	3N03	Proposed	This elevated hillslope location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123273	Remove	
	3S02	Proposed	This elevated hilltop location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M29-T2	Remove	
	M89-T2	Remove	
3S03	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.	
3 (continued)	3N04	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123272	Remove	
	3S04	Modify	This elevated hilltop location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M89-T3	Remove	
	3N08, 3S08	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123270	Remove	
	M30-T1	Remove	
	M90-T1	Remove	
	3N12, 3S12	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123268	Remove	
	M30-T3	Remove	
	M90-T3	Remove	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	3N16, 3S16	Proposed	
	PP#123265	Remove	
M31-T1	Remove		
M91-T1	Remove		

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

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<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
	3N17, 3S17	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123264	Remove	
	M31-T2	Remove	
	M91-T2	Remove	
	3N19, 3S19	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123263	Remove	
	3N20, 3S20	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123262	Remove	
	M31-T3	Remove	
	M91-T3	Remove	
	3N21, 3S21	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123261	Remove	
	M32-T1	Remove	
	3N22, 3S22	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	M92-T1	Remove	
	3N23, 3S23	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123260	Remove	
	M32-T2	Remove	
	M92-T2	Remove	
	3N24, 3S24	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123259	Remove	

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<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
3 (continued)	3N25, 3S25	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123258	Remove	
	M32-T3	Remove	
	M92-T3	Remove	
	3N26, 3S26	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123257	Remove	
	3N27, 3S27	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123256	Remove	
	M33-T1	Remove	
	M93-T1	Remove	
	3N28, 3S28	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123255	Remove	
	M33-T2	Remove	
	M93-T2	Remove	
	3N29, 3S29	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123254	Remove	
	3N31, 3S31	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123253	Remove	
	M33-T3	Remove	
	3N32, 3S32	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123252	Remove	
	M33-T4	Remove	
	M93-T3	Remove	
	3N33, 3S33	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
PP#123251	Remove		
M33-T5	Remove		
M93-T4	Remove		
3N35, 3S35	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.	
PP#123250	Remove		
M34-T1	Remove		

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<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
	M94-T1	Remove	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	3N36, 3S36	Proposed	
	PP#123249	Remove	
	3N37, 3S37	Proposed	
	PP#123248	Remove	
	M34-T2	Remove	
	M94-T2	Remove	
<b>3</b> (continued)	3N38, 3S38	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123247	Remove	
	M34-T3	Remove	
	M95-T1	Remove	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	3N39, 3S39	Proposed	
	PP#123246	Remove	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	3N40, 3S40	Proposed	
	PP#123245	Remove	
	M35-T1	Remove	
M95-T2	Remove		
<b>4</b>	4N02, 4S02	Proposed	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	M17-T3	Remove	
	M77-T3	Remove	
	PP#123351	Remove	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	PP#123350	Remove	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	4N03, 4S03	Proposed	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	M18-T1	Remove	
	M78-T1	Remove	
	4N50, 4S50	Proposed	This elevated location would be prominently visible to travelers on Palmer Avenue and Cherry Valley Boulevard, as well as to residents in the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	PP#123287	Remove	
	M27-T1	Remove	
	M87-T1	Remove	
	4N51, 4S51	Proposed	



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<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>	
	PP#123286	Remove	This ridgeline location would be prominently visible from Palmer Avenue and residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	4N52, 4S52	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	PP#123285	Remove		
	M27-T2	Remove		
	M87-T2	Remove		
	4N53, 4S53	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	PP#123284	Remove		
	4N54, 4S54	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	PP#123283	Remove		
	M27-T3	Remove		
	M87-T3	Remove		
4 (continued)	4N55, 4S55	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	PP#123282	Remove		
	M27-T4	Remove		
	M87-T4	Remove	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	4N56	Modify		
	4S56	Proposed		
	PP#123281	Remove		
		M88-T1	Remove	This Ridgeline Location Would Be Prominently Visible From Residences And Roads Within The Tukwet Canyon Residential Development Located Immediately South And Adjacent To The Corridor.
	4N57, 4S57	Proposed		
		PP#123280	Remove	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	4N58	Proposed		
		PP#123279	Remove	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	4S58	Modify		
	M88-T2	Remove		
	4S59	Modify	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.	
	4S60	Proposed		
5	PP#123359	Remove		

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Segment	Structures	Status	Visibility Discussion
	M17-T1	Remove	This ridgeline location would be visible from residences and roads within the north Banning residential neighborhoods located immediately south and adjacent to the corridor.
	M77-T1	Remove	
	PP#123358	Remove	This ridgeline location would be visible from residences and roads within the north Banning residential neighborhoods located immediately south and adjacent to the corridor.
6	6N28	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M3-T2	Remove	
	M64-T1	Remove	
	6S28	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	T250	Remove	
	6S28A	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	T249	Remove	
	T248	Remove	
	6N29	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M4-T1	Remove	
M64-T2	Remove		

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<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
6 (continued)	6S29	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T247	Remove	
	T247A	Remove	
	6N30	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M4-T2	Remove	
	M64-T3	Remove	
	6S30	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T246	Remove	
	6S30A	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T245	Remove	
	6N31	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M4-T3	Remove	
	M65-T1	Remove	
	6S31	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T244	Remove	
	6S31A	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T243	Remove	
	6N32	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M5-T1(1)	Remove	
	M65-T2	Remove	
	6S32	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T241	Remove	
	6S33	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T240	Remove	
	T239	Remove	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	6N34	Proposed	
	M5-T2	Remove	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	M65-T3	Remove	
	6S34	Proposed	
	T238	Remove	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
6N35	Proposed		

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

**Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a**

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
	M5-T3	Remove	This ridgeline location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	M66-T1	Remove	
	6S35	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	T237	Remove	
	T236	Remove	This ridgeline location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.

**TABLE 2: DURING CONSTRUCTION MITIGATION MEASURES AND APMs**

<b>Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a</b>			
The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.			
<b>Segment</b>	<b>Structures</b>	<b>Status</b>	<b>Visibility Discussion</b>
6 (continued)	6S36	Proposed	This elevated hillslope location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	T235	Remove	
	6N37	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	M6-T1	Remove	
	M66-T2	Remove	
	6S37	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	T234	Remove	
	T229	Remove	This location would be prominently visible from the nearby Pacific Crest Trail.
	6S41	Proposed	This location would be prominently visible from the nearby Pacific Crest Trail.
	T228	Remove	
	T228	Remove	This location would be prominently visible from the nearby Pacific Crest Trail.
	6N42	Proposed	This location would be prominently visible from the nearby Pacific Crest Trail.
	6S42	Proposed	This location would be prominently visible from the nearby Pacific Crest Trail.



## **ATTACHMENT E**

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### Post-Construction Mitigation Measures, APMs, and BO CMs

**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Agriculture</b>			
<b>AG-3a:</b> Agricultural lands	<p><b>Establish agreement and coordinate construction activities with agricultural landowners.</b> [Partial MM text]                      The purpose of this agreement will be to set forth the use of agriculturally utilized Prime Farmland, Farmland of Statewide Importance, Unique Farmland during construction in order to: (1) schedule proposed construction activities at a location and time when damage to agricultural operations would be minimized, and (2) ensure that any areas damaged or disturbed by construction are restored to a condition mutually agreed upon by the landowner and SCE and in accordance with the existing easement language.</p> <p>... If damage or destruction does occur, SCE shall perform restoration activities on the disturbed area in order to return the area to a pre-determined condition or the pre-construction condition, whichever option is agreed upon by the landowner and SCE and in accordance with the existing easement language. This could include activities such as soil preparation, regrading, and reseeding. Restoration activities performed by SCE will vary, depending on the language in existing or newly acquired or revised easement documents. This measure applies to landowners with agriculturally utilized land that is impacted by the Proposed Project. SCE shall provide proof of the continued use of Important Farmland currently used for agriculture through the submittal of a signed temporary construction easement or grant of easement agreement between an individual property owner and SCE. The signed agreements shall be submitted to the CPUC for review and approval prior to the start of construction.</p>	Confirm restoration performed in accordance with agreement.	
<b>Biological Resources – Vegetation (NOTE: The BIO Vegetation APMs have been superseded by the following mitigation measures.)</b>			
<b>VEG-1a:</b> Monitoring and reporting	<p><b>Conduct biological monitoring and reporting.</b> [Partial MM text]...The lead biologist will be SCE’s primary point of contact to CPUC, BLM, CDFW, and USFWS regarding any biological resources issues and implementation of related mitigation measures and permit conditions throughout project construction and post-construction restoration work. In addition, the lead biologist will oversee supervision and training of biological monitors (below) and preparation and submission of all monitoring reports and notifications (below). ...</p> <p><b>Biological monitor duties and responsibilities:</b> Throughout the duration of construction, SCE shall conduct biological monitoring of all activities in any area where there is a potential to impact sensitive biological resources or jurisdictional waters, including but not limited to vegetation removal/trimming/disturbance, all ground-disturbing work activities, and initial “drive and crush” in the project area, including work sites, yards, staging areas, access roads, and any area subject to project disturbance. Pre-construction activities (e.g., for geotechnical borings, hazardous waste evaluations, etc.) and post-construction restoration shall also be monitored by a biological monitor during all such activities. ...</p> <p><b>Reporting:</b> ...Monitoring activities shall be thoroughly and accurately documented on a daily basis.</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE’s PSE status); CV-MSHCP (within the CV-MSHCP regardless of SCE’s PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	See measure VEG-1d for required HRRP post construction restoration reporting.	

**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<p><b>VEG-1c:</b></p>	<p><b>Minimize native vegetation and habitat loss.</b> [Partial MM text]...</p> <p>On completion of project construction, SCE shall provide CPUC and BLM with GIS shapefiles of all actual temporary and permanent disturbance areas, accurate aerial imagery of the project area, and summary data of all discrepancies between final engineering and “as-built” conditions for each vegetation or habitat type, within each jurisdictional area (San Bernardino County, WR-MSHCP, CV-MSHCP, reservation, and BLM).</p> <p><b>Implementation locations:</b> San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE’s PSE status); CV-MSHCP (within the CV-MSHCP regardless of SCE’s PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>Verify submittal of GIS shapefiles to CPUC and BLM</p>	
<p><b>VEG-1d:</b></p>	<p><b>Restore or revegetate temporary disturbance areas.</b> [Partial MM text]...</p> <p><b>Reporting (for Part A and Part B).</b> For all revegetation or restoration areas, SCE will provide annual reports to the CPUC and BLM verifying the total vegetation acreage subject to temporary and permanent disturbance, identifying which items of the HRRP have been completed, and which items are still outstanding. The annual reports will also include a summary of the reclamation, revegetation, or restoration activities for the year, a discussion of whether performance standards for the year were met, any remedial actions conducted and recommendations for remedial action, if warranted, that are planned for the upcoming year. Each annual report will be submitted within 90 days after completion of each year of revegetation and restoration work</p> <p><b>Implementation locations:</b> Parts A and B of this mitigation measure shall apply as follows: San Bernardino County (all); WR-MSHCP (within the WR-MSHCP regardless of SCE’s PSE status); CV-MSHCP (within the CV-MSHCP regardless of SCE’s PSE status); BLM (all); reservation (recommended for all Morongo Tribal Lands).</p>	<p>Verify implementation of HRRP, including achieving performance standards required reporting.</p>	

**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

<p><b>VEG-1e:</b></p>	<p><b>Compensate for permanent habitat loss.</b> SCE shall compensate for permanent or long-term habitat loss through off-site habitat acquisition and management or through participation in an approved in-lieu fee compensatory mitigation bank. This compensation may be accomplished through participation in the WR-MSHCP, CV-MSHCP (within the respective MSHCP areas) if SCE obtains PSE status. This mitigation measure will be applicable to all permanent project disturbance areas and to areas designated as temporary disturbance, but that cannot be effectively revegetated or restored to replace habitat values within a five-year timeframe.</p> <p>Habitat compensation for all permanent or long-term habitat loss that is not compensated through participation in the WR-MSHCP or CV-MSHCP will be accomplished by acquisition of mitigation land or conservation easements or by providing funding for specific land acquisition, endowment, restoration, and management actions. SCE will prepare a Habitat Compensation Plan to be reviewed and approved by the CPUC, BLM, in consultation with the USFWS and CDFW.</p> <p>SCE will acquire and protect, in perpetuity, compensation habitat to mitigate impacts to biological resources as detailed below. SCE shall be responsible for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of compensation lands. The compensation lands will be placed under conservation management to be funded through the terms described herein. If there is any conflict between the requirements of this mitigation measure and requirements of any resource agency permit (e.g., USFWS Biological Opinion or CDFW Incidental Take Permit), the more stringent requirement shall apply.</p> <p>The acreages of compensation land will be based upon final engineering calculation of impacted acreage for each resource and on ratios set forth in this measure, or in the USFWS Biological Opinion, the CDFW Streambed Alteration Agreement, the CDFW Incidental Take Permit, or the Consistency Determination, whichever presents a higher ratio. Acreages will be adjusted as appropriate for other alternatives or future modifications during implementation.</p> <p>Compensation will be provided for impacts to the following resources, at the ratios specified below (acres acquired and preserved to acres impacted). These ratios reflect multiple biological resource values, including habitat suitability for special-status species.</p> <ul style="list-style-type: none"> <li>▪ Previously disturbed lands (agriculture, developed/disturbed) and open water: n/a (no habitat compensation required)</li> <li>▪ Chaparral, desert scrub, and grassland/forbland: 1:1</li> <li>▪ Alluvial scrub, coast live oak woodland, riparian woodland, and aeolian sand: 3:1</li> <li>▪ Coastal sage scrub within USFWS designated coastal California gnatcatcher critical habitat and coastal sage scrub outside of designated critical habitat that is occupied by California gnatcatcher: 2:1</li> <li>▪ Coastal sage scrub outside of USFWS designated coastal California gnatcatcher critical habitat that is suitable habitat, but not occupied by California gnatcatcher: 1:1</li> </ul> <p>The Habitat Compensation Plan will specify compensation acreage for each habitat type, based on final engineering and on MSHCP coverage as applicable. Final compensation requirements may be adjusted to account for any deviations in project disturbance, according to the as-built shapefiles aerial imagery (Mitigation Measure VEG-1c).</p> <p><b>Compensation Land Selection Criteria.</b> Criteria for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of compensation lands for impacts to biological resources will include all of the following:</p>		
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**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

	<ul style="list-style-type: none"> <li>▪ Compensation lands will provide habitat value that is equal to or better than the quality and function of the habitat impacted by the project, taking into consideration soils, vegetation, topography, human-related disturbance, wildlife movement opportunity, proximity to other protected lands, management feasibility, and other habitat values, subject to review and approval by CPUC and BLM;</li> <li>▪ To the extent that proposed compensation habitat may have been degraded by previous uses or activities, the site quality and nature of degradation must support the expectation that it will regenerate naturally when disturbances are removed;</li> <li>▪ Be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;</li> <li>▪ Not have a history of intensive recreational use or other disturbance that might cause future erosion or other habitat damage, and make habitat recovery and restoration infeasible;</li> <li>▪ Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;</li> <li>▪ Not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat;</li> <li>▪ Must provide wildlife movement value equal to that on the project site, based on topography, presence and nature of movement barriers or crossing points, location in relationship to other habitat areas, management feasibility, and other habitat values; and</li> <li>▪ Have water and mineral rights included as part of the acquisition, unless the CPUC and BLM, in consultation with CDFW and USFWS, agree in writing to the acceptability of land without these rights.</li> </ul> <p><b>Review and Approval of Compensation Lands Prior to Acquisition.</b> SCE shall submit a Draft Habitat Compensation Plan for review and approval by the CPUC and BLM describing the parcel(s) intended for protection. This Plan will discuss the suitability of the proposed parcel(s) as compensation lands in relation to the selection criteria listed above.</p> <p><b>Management Plan.</b> SCE or approved third party will prepare a management plan for the compensation lands in consultation with the entity that will be managing the lands. The goal of the management plan will be to support and enhance the long-term viability of the biological resources. The Management Plan will be submitted for review and approval to the CPUC and BLM, in consultation with CDFW and USFWS.</p> <p><b>Compensation Lands Acquisition Requirements.</b> SCE will comply with the following requirements relating to acquisition of the compensation lands after the CPUC and BLM have approved the proposed compensation lands:</p> <ul style="list-style-type: none"> <li>▪ <b>Preliminary Report.</b> SCE or an approved third party will provide a recent preliminary title report, initial hazardous materials survey report, biological resources analysis, and other necessary or requested documents for the proposed compensation land to the CPUC and BLM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPUC in consultation with CDFW and USFWS. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission, and the Wildlife Conservation Board.</li> <li>▪ <b>Title/Conveyance.</b> SCE will acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPUC and BLM, in consultation with USFWS and CDFW. Any transfer of a conservation easement or fee title must be to CDFW, to a non-profit</li> </ul>		
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**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

	<p>organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPUC and BLM. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement will be recorded in favor of CDFW or another entity approved by the CPUC and BLM. If an entity other than CDFW holds a conservation easement over the compensation lands, the CPUC and BLM may require that CDFW or another entity approved by the CPUC and BLM, in consultation with CDFW and USFWS, be named a third party beneficiary of the conservation easement. SCE will obtain approval of the CPUC and BLM of the terms of any transfer of fee title or conservation easement to the compensation lands.</p> <ul style="list-style-type: none"> <li>▪ <b>Initial Protection and Habitat Improvement.</b> SCE will fund activities that the CPUC and BLM may require for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. A non-profit organization, CDFW, or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPUC and BLM, in consultation with USFWS and CDFW, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFW takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFW or its designee.</li> <li>▪ <b>Property Analysis Record.</b> Upon identification of the compensation lands, SCE will conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPUC and BLM, in consultation with USFWS and CDFW, before it can be used to establish funding levels or management activities for the compensation lands.</li> <li>▪ <b>Long-term Maintenance and Management Funding.</b> SCE will provide funding to establish an account with non-wasting capital that will be used to fund the long-term maintenance and management of the compensation lands. The amount of money will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands. SCE must obtain the BLM and Riverside County's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPUC and BLM will consult with USFWS and CDFW before deciding whether to approve an entity to hold the project's long-term maintenance and management funds.</li> </ul> <p>SCE will ensure that an agreement is in place with the long-term maintenance and management fund holder/manager to ensure the following requirements are met:</p> <ul style="list-style-type: none"> <li>- <b>Interest.</b> Interest generated from the initial capital long-term maintenance and management fund will be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, habitat improvements, patrol and law enforcement activities, and any other action that is approved by the CPUC and BLM and is designed to protect or improve the habitat values of the compensation lands.</li> <li>- <b>Withdrawal of Principal.</b> The long-term maintenance and management fund principal will not be drawn upon unless such withdrawal is deemed necessary by the CPUC and BLM, or by the approved third-party long-term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.</li> </ul>		
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**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	<ul style="list-style-type: none"> <li>– <b>Pooling Long-Term Maintenance and Management Funds.</b> An entity approved to hold long-term maintenance and management funds for the project may pool those funds with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands. However, for reporting purposes, the long-term maintenance and management funds for this project must be tracked and reported individually to the CPUC and BLM.</li> <li>▪ <b>Other Expenses.</b> In addition to the costs listed above, SCE will be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to CDFW or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.</li> <li>▪ <b>Delegation.</b> The responsibility for acquisition of compensation lands may be delegated to a third party, by written agreement of the CPUC and BLM, in consultation with CDFW, prior to land acquisition, enhancement or management activities.</li> </ul> <p><b>Implementation Locations:</b> This mitigation measure applies to all locations within San Bernardino County and on all BLM lands, and is recommended for implementation on all tribal lands. Within the WR-MSHCP and CV-MSHCP areas, if SCE does not obtain PSE status under the applicable MSHCP, this mitigation measure shall apply within the MSHCP area. If SCE obtains PSE status under either MSHCP, the project’s permanent habitat impacts will be compensated according to the requirements of the MSHCP and this mitigation measure will not apply within the applicable MSHCP area.</p>		

**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

<p><b>VEG-4a:</b></p>	<p><b>Minimize and mitigate impacts to special-status plants.</b> [Partial MM text] ...</p> <ul style="list-style-type: none"> <li>▪ <b>Off-site compensation.</b> SCE shall provide compensation lands consisting of habitat occupied by the impacted CRPR 1 or 2 ranked plants at a 1:1 ratio of acreage and number of plants for any occupied habitat affected by the project. Occupied habitat will be calculated on the project site and on the compensation lands as including each special-status plant occurrence and a surrounding 100-foot buffer area. Off-site compensation shall be incorporated into the project's Habitat Compensation Plan (under Mitigation Measure VEG-1e), for review and approval by the CPUC and BLM in consultation with CDFW and USFWS.</li> <li>▪ <b>Salvage.</b> SCE shall consult with a qualified restoration ecologist or horticulturist at a qualified institution such as Rancho Santa Ana Botanic Garden (RSABG) regarding the feasibility and likely success of salvage efforts for each species. If salvage is deemed to be feasible, based on prior success with similar species, then SCE shall prepare and implement a Special-status Plant Salvage and Relocation Plan, to be reviewed and approved by the CPUC and BLM, in consultation with CDFW and USFWS, prior to direct or indirect disturbance of any occupied habitat. For special-status plants, the goal shall be establishment of a new viable occurrence, equal or greater in extent and numbers to the affected occurrence. For cacti and yuccas, the goal shall be maximum practicable survivorship of salvaged plants. The Plan will include at minimum: (a) species and locations of plants identified for salvage; (b) criteria for determining whether an individual plant is appropriate for salvage; (c) the appropriate season for salvage; (d) equipment and methods for collection, transport, and re-planting plants or seed banks, to retain intact soil conditions and maximize success; (e) for shrubs, cacti, and yucca, a requirement to mark each plant to identify the north-facing side prior to transport, and replant it in the same orientation; (f) details regarding storage of plants or seed banks for each species; (g) location of the proposed recipient site, and detailed site preparation and plant introduction techniques for top soil storage, as applicable; (h) a description of the irrigation, weed control, and other maintenance activities; (i) success criteria, including specific timeframe for survivorship and reproduction of each species; and (j) a detailed monitoring program, commensurate with the Plan's goals.</li> </ul> <p>Annual monitoring reports shall be submitted to CPUC and BLM. Reports shall include, but not be limited to, details of plants salvaged, stored, and transplanted (salvage and transplanting locations, species, number, size, condition, etc.); adaptive management efforts implemented (date, location, type of treatment, results, etc.); and evaluation of success of transplantation.</p> <ul style="list-style-type: none"> <li>▪ <b>Horticultural propagation and off-site introduction.</b> If salvage and relocation is not believed to be feasible for special-status plants, then SCE shall consult with RSABG, or another qualified entity, to develop an appropriate experimental propagation and relocation strategy, based on the life history of the species affected. The Plan will include at minimum: (a) collection and salvage measures for plant materials (e.g., cuttings), seed, or seed banks, to maximize success likelihood; (b) details regarding storage of plant, plant materials, or seed banks; (c) location of the proposed propagation facility, and proposed methods; (d); time of year that the salvage and other practices will occur; (e) success criteria; and (f) a detailed monitoring program, commensurate with the Plan's goals.</li> </ul> <p><b>Implementation locations outside of MSCHPs:</b> This mitigation measure shall apply to all lands in San Bernardino County, on all BLM lands, and they are recommended for implementation on Morongo Tribal Lands.</p> <p><b>Implementation locations for WR-MSHCP and CV-MSHCP:</b> If SCE does not obtain PSE status under the WR-MSHCP or CV-MSHCP, this mitigation measure shall apply in its entirety within the relevant MSHCP area. The Pre-construction Survey and Native Cactus and Yucca portions of this mitigation measure shall apply within both MSHCP areas regardless of SCE's PSE status. If SCE obtains PSE status under either MSHCP, mitigation for the project's impacts to special-status plants covered under the Plan may be implemented according to the</p>	<p>Verify off-site compensation rations; verify implementation of Special-status Plant Salvage and Relocation Plan</p>	
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**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
	requirements of the MSHCP, and the remainder of this mitigation measure will not apply within the MSHCP area for species covered under the Plan. For potential impacts to special-status plants not covered under the Plan, this measure will apply in full.		
<b>Biological Resources – Wildlife (NOTE: The BIO Wildlife APMs have been superseded by the following mitigation measures.)</b>			
<b>WIL-2b:</b>	<b>Prepare and implement Raven Monitoring, Management, and Control Plan.</b> [Partial MM text] .. <b>Implementation locations:</b> This mitigation measure applies on BLM lands and is recommended on all Morongo Tribal Lands. No suitable desert tortoise habitat is present within San Bernardino County and the WR-MSHCP; therefore, this mitigation measure does not apply in these jurisdictions. In the CV-MSHCP, this mitigation measure shall apply in its entirety regardless of SCE's PSE status.	Verify implementation of Raven Plan for life of the project	
<b>WIL-2d:</b>	<b>Conduct surveys and avoidance for Stephens' kangaroo rat.</b> [Partial MM text]... SCE shall consult with CDFW and USFWS and obtain appropriate take authorization or permits. SCE shall implement the conservation measures contained within these permits. <b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, throughout the WR-MSHCP area (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands. No suitable SKR habitat is present in the CV-MSHCP portions of the ROW or on BLM land, so this mitigation measure shall not apply within those areas.	Verify implementation of post-construction permit requirement, if any.	
<b>WIL-2e:</b>	<b>Conduct surveys and avoidance for coastal California gnatcatcher.</b> [Partial MM text] SCE shall implement the conservation measures contained within these permits. <b>Implementation locations:</b> This mitigation measure shall apply within San Bernardino County, throughout the WR-MSHCP lands (regardless of SCE's PSE status), and is recommended within Morongo Tribal Lands. No suitable CAGN habitat is present in the CV-MSHCP portions of the ROW or on BLM land, so this mitigation measure shall not apply within those areas.	Verify implementation of post-construction permit requirement, if any.	
<b>WIL-3a:</b>	<b>Evaluate bird collision risk and implement APLIC design guidelines.</b> SCE shall adhere to recommendations published by APLIC (2012, <i>Reducing Avian Collisions with Power Lines: The State of the Art in 2012</i> ).	Verify implementation during post-construction.	
<b>Cultural Resources (NOTE: The Cultural APMs have been superseded by the following mitigation measures.)</b>			
<b>CL-1b:</b>	<b>Develop Cultural Resource Management Plan (CRMP).</b> [Partial MM text]... The CRMP shall include provisions for analysis of data in a regional context, reporting of results within one year of completion of field studies, curation of artifacts (except from private land) and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts' data) at a facility that is approved by BLM, and dissemination of reports to local and State repositories, libraries, and interested professionals. The BLM will retain ownership of artifacts collected from BLM managed lands. SCE shall attempt to gain permission for artifacts from privately held land to be curated with the other project collections. The CRMP shall specify that archaeologists and other discipline specialists conducting the studies meet the Professional Qualifications Standards mandated by the OHP.	Verify required reporting and curation are completed.	

**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Geology &amp; Soils</b>			
<b>G-5a:</b>	<p><b>Assess soil characteristics to aid in appropriate foundation design.</b> [Partial MM text]...                      SCE shall submit a letter signed by a California registered geotechnical engineer following the completion date of all of the foundation activities for each segment. The letter will confirm that SCE followed the geotechnical report recommendations and the common engineering practice in southern California at the time of the project.</p>	Verify receipt of required letter	
<b>Paleontological Resources (NOTE: APM PAL-1 has been superseded by the following mitigation measures.)</b>			
<b>PAL-1b:</b>	<p><b>Develop Paleontological Resource Mitigation and Monitoring Plan.</b> [Partial MM text]...                      ■ The Plan shall state which resources will be avoided and which shall be recovered for their data potential. Where possible, recovery is preferred over avoidance in order to mitigate the potential for looting of paleontological resources. The Plan shall also detail methods of recovery, preparation and analysis of specimens, final curation of specimens at a federally accredited repository, data analysis, and reporting.</p>	Verify final reporting and curation, if any. See PAL-1e	
<b>PAL-1e:</b>	<p><b>Final reporting and curation.</b> At the conclusion of laboratory work and museum curation, a final report will be prepared describing the results of the paleontological monitoring efforts associated with the project. The report will include a summary of the field and laboratory methods, an overview of the Proposed Project area geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, then a copy of the report will also be submitted to the designated museum repository.</p> <p>All significant fossils collected will be prepared in a properly equipped paleontology laboratory to a point ready for curation no more than 60 days after all analyses are completed. Preparation will include the careful removal of excess matrix from fossil materials and stabilizing and repairing specimens, as necessary. Following laboratory work, all fossils specimens will be identified to the lowest taxonomic level, cataloged, analyzed, and delivered to an accredited museum repository for permanent curation and storage. The cost of curation is assessed by the repository and is the responsibility of the Applicant.</p>	Verify compliance.	

**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Transportation &amp; Traffic</b>			
T-4a:	<p><b>Repair roadways damaged by construction activities.</b> If roadways, sidewalks, medians, curbs, shoulders, or other such features are damaged by the project's construction activities, as determined by the affected public agency, such damage shall be repaired and streets restored to their pre-project condition by SCE. Prior to construction, SCE shall confer with agencies having jurisdiction over the roads anticipated to be used by delivery vehicles and equipment. Unless an alternative method for determining roadway condition is required by a given jurisdiction, at least 30 days prior to construction, SCE shall photograph or video record all construction route public roads within 500 feet in each direction of project access points (i.e., locations where vehicles leave public roads to reach project sites) and roadways where the road surface will be damaged by project-related trenching or digging, and shall provide the respective local jurisdictions, CPUC, BLM, and Caltrans (if applicable) with a copy of these images.</p> <p>At least 15 days prior to construction, SCE shall provide a letter or email to CPUC and BLM confirming that the mitigation measure has been executed. This communication shall identify persons or agencies contacted, contact information, and the date of contact, and shall summarize discussions and/or agreements reached.</p> <p>At the end of major construction, SCE shall coordinate with each affected jurisdiction to confirm what repairs would be required. Any damage shall be repaired to the pre-construction condition within 60 days from the end of all construction, or on a schedule mutually agreed to by SCE and the jurisdiction. SCE shall provide CPUC and BLM confirming documentation when the coordination has been completed and when the repairs have been completed.</p>	Verify compliance and repair of roads	
T-8a:	<p><b>Obtain FAA review and approval of all structures and spans posing potential aircraft safety hazards.</b> SCE shall submit the required forms and information to FAA for its review and approval of transmission structures and conductor spans that may require installation of safety devices or other restrictions. Copies of FAA's review and approval shall be provided to CPUC and BLM at least 60 days prior to erection of structures or installation of conductors that would be in violation of FAA standards and requirements. These structures and spans shall be identified to CPUC and BLM, and the planned installation of required lighting and marker balls described.</p>	Verify that FAA requirements are implemented, including required forms.	
<b>Utilities and Public Services</b>			
UPS-2a:	<p><b>Protect pipelines and overhead and underground utilities.</b> Prior to commencing construction, SCE shall perform engineering studies to determine whether and what cathodic protection would be required on pipelines potentially affected. SCE shall submit to the CPUC and BLM written documentation of the following:</p> <ul style="list-style-type: none"> <li>▪ Evidence of coordination with all pipeline and utility owners with facilities in the vicinity of planned construction, including their review of SCE's construction plans and a description of any protective measures or compensation to be implemented to protect affected facilities;</li> <li>▪ Copy of the Applicant's database of emergency contacts for pipelines and utilities that may be in close proximity or require monitoring during construction of the project; and</li> <li>▪ Evidence that the project meets all applicable local requirements.</li> </ul>	Verify cathodic protection is implemented as necessary.	



**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Visual Resources</b>			
VR-3a	: <b>Reduce color contrast of retaining walls, land scars, and graveled surfaces.</b> Where construction would unavoidably create land scars or retaining walls visible from sensitive public viewing locations (as defined in Table D.18-11), disturbed soils and new walls shall be treated with an appropriate color or material (Natina Concentrate, Eonite, or Permeon, or similar). The material shall be approved by the CPUC and BLM, and the intent shall be to reduce the visual contrast created by the lighter-colored disturbed soils and rock with the darker soil and vegetated surroundings. SCE shall consult with the CPUC and BLM and/or their authorized representative(s) on a site-by-site basis and obtain written approval prior to the use of any colorants.	Verify appropriate treatments are implemented to address land scarring and retaining walls.	
VR-7a:	<b>Minimize night lighting at project facilities.</b> SCE shall avoid night lighting where possible and minimize its use under all circumstances. To ensure this, SCE shall prepare a Night Lighting Management Plan for both construction and operation....	Verify implementation of night lighting management plan	
VR-8a:	<b>Minimize visual contrast in project design.</b> [Partial MM Text]... <ul style="list-style-type: none"> <li>▪ <b>Vegetation Manipulation.</b> Use existing vegetation to screen graded areas and facilities from public viewing to the extent feasible. Feather and thin the edges of cleared areas and retain a representative mix of plant species and sizes.</li> <li>▪ <b>Reclamation and Restoration.</b> Blend the disturbed areas into the characteristic landscape including access and spur roads and disturbed areas created during construction (transmission line structures, and construction yards and staging areas). Replace soil, brush, rocks, and natural debris over these disturbed areas. Newly introduced plant species shall be of a form, color, and texture that blend with the landscape.</li> </ul>	Verify implementation of compliance with Project Design Plan.	
<b>Water Resources &amp; Hydrology</b>			
WR-2a: <i>MM WR-2a supersedes APMs HYDRO-2 and HYDRO-3</i>	<b>Implement an Erosion Control Plan and demonstrate compliance with water quality permits.</b> [Partial MM text]... Locations requiring erosion control/SWPPP corrective actions/repairs shall be tracked, including dates of completion, and documented during inspections. Inspections and monitoring shall be performed in compliance with the Federal and California Construction General Permits. The inspection reports shall be maintained and kept in their respective SWPPP, kept on site as required by the Federal and State Construction General Permits, and made available to the RWQCB, CPUC, BLM, counties, local municipalities, and tribal governments, on request. Additionally, an Annual Report shall be filed for each reporting period in compliance with Federal and California Construction General Permit reporting requirements. ....	Confirm SCE's SWPPP close-out (notices of termination)	
WR-3a:	<b>Implement flood, erosion, and scour protection for aboveground and belowground improvements.</b> [Partial MM text]... SCE shall evaluate and conform to NPDES MS4 Phase I and II requirements for post-construction BMPs and, in consultation with San Bernardino and Riverside Counties and applicable local jurisdictions and agencies, prepare or conform to existing Water Quality Management Plans where determined necessary.	Verify implementation of post-construction BMPs	

**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status
<b>Wildland Fire</b>			
<b>WF-1a:</b>	<p><b>Prepare and implement a Fire Management Plan.</b> A Project-specific fire prevention plan for both construction and operation of the project shall be prepared by SCE and submitted to for review prior to initiation of construction. The draft copy of this Plan is to be provided to each fire agency at least 90 days before the start of any construction activities in areas designated as Very High or High Fire Hazard Severity Zones. Plan reviewers shall include CPUC, BLM, CAL FIRE, San Bernardino and Riverside Counties, and local municipal fire agencies with jurisdiction over areas where the project is located. Comments on the Plan shall be provided by SCE to all other participants, and SCE shall resolve each comment in consultation with CAL FIRE, BLM, and the Morongo Fire Department, as appropriate. The final Plan shall be approved by these agencies at least 30 days prior to the initiation of construction activities. SCE shall fully implement the Plan during all construction and maintenance activities.</p> <p>A project Fire Marshal or similar qualified position shall be established by SCE to enforce all provisions of the Fire Management Plan as well as perform other duties related to fire detection, prevention, and suppression for the project. SCE shall monitor construction activities to ensure implementation and effectiveness of the plan.</p> <p>The Plan shall include at a minimum SCE's Specification E-2005-104 (Transmission line Project Fire Plan), including any updates and amendments, and other requirements specified below.</p> <p>The plan should recognize and prepare for the high probability that fast moving, wind driven wildfires will burn adjacent or through the Proposed Project with some regularity as the result of severe fire weather conditions, flash fuels such as provided by perennial grasslands, and abundant ignition sources. Wind driven fires can quickly overcome operational and maintenance crews, placing their health and safety at risk.</p> <p>The Plan shall cover:</p> <ul style="list-style-type: none"> <li>▪ The purpose and applicability of the plan;</li> <li>▪ Responsibilities and duties;</li> <li>▪ Preparedness training and drills;</li> <li>▪ Procedures for fire reporting, response, and prevention that include               <ul style="list-style-type: none"> <li>– identification of daily site-specific risk conditions</li> <li>– the tools and equipment needed on vehicles and to be on hand at sites</li> <li>– reiteration of fire prevention and safety considerations during tailboard meetings</li> <li>– daily monitoring of the red-flag warning system with appropriate restrictions on types and levels of permissible activity,</li> </ul> </li> <li>▪ Coordination procedures with BLM and San Bernardino and Riverside County fire officials.</li> <li>▪ Crew training, including fire safety practices and restrictions,</li> <li>▪ Method for verification that Plan protocols and requirements are being followed.</li> </ul>	Verify compliance with Fire Management Plan during post-construction and operations.	
<b>Electrical Interference</b>			
<b>EIS-1b:</b>	<p><b>Document and resolve electronic interference complaints.</b> After energizing the transmission line, SCE shall respond to, document, and resolve radio/television/electronic equipment interference complaints received. These records shall be made available to the CPUC and BLM for review upon request. All unresolved disputes shall be referred by SCE to the CPUC for resolution.</p>	Upon request, SCE to submit required information.	

**TABLE 3: POST-CONSTRUCTION MITIGATION MEASURES AND APMs**

<b>Impact</b>	<b>Applicant Proposed Measure (APM) or Mitigation Measure</b>	<b>Monitoring Requirement</b>	<b>Status</b>
<b>EIS-2a:</b>	<b>Implement grounding measures.</b> As part of the siting and construction process, SCE shall identify objects (such as metal fences, metal buildings, and metal pipelines) within and near the right-of-way that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE's standards. The identification of objects shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.	SCE shall submit documentation demonstrating compliance with this measure.	

## **ATTACHMENT F**

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### Nesting Bird Management Plan

# West of Devers Upgrade Project California Public Utilities Commission Nesting Bird Management Plan

Prepared in collaboration with the following  
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**August 2015**

**Note:** The California Public Utilities Commission (CPUC) convened a series of meetings with the technical working group (TWG) to prepare a Nesting Bird Management Plan (NBMP) for the West of Devers Project. The TWG held four in-person meetings and two conference call meetings between October 2014 and July 2015 to discuss the format and content of a NBMP that could be applied to the West of Devers Project. This plan reflects the input and discussion of the TWG, and includes a few additional text changes that were made to address final agency comments. With these additional changes, this document is the final product of the TWG.

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## Acronyms and Abbreviations

APM	Applicant Proposed Measure
BGEPA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
BMP	Best Management Practices
BSA	Biological Survey Area
CAISO	California Independent System Operator
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CNDDDB	California Natural Diversity Database
CPCN	Certificate of Public Convenience and Necessity
CPUC	California Public Utilities Commission
CSS	California Species of Special Concern
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
EIR/EIS	Environmental Impact Report/Environmental Impact Statement
ESA	Environmentally Sensitive Area
FESA	Federal Endangered Species Act
FRED	Field Environmental Reporting Database
GPS	Geographical Positioning System
kV	Kilovolt
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
MW	Megawatt
MSHCP	Multiple Species Habitat Conservation Plan
NEPA	National Environmental Policy Act
NTP	Notice to proceed
Plan	Nesting Bird Management Plan
ROW	Right-of-Way
SCE	Southern California Edison
SPUT	USFWS Special Purpose Utility (permit)
USFWS	U.S. Fish and Wildlife Service
WOD	West of Devers Upgrade Project
WRMSHCP	Western Riverside Multiple Species Habitat Conservation Plan

# 1. Introduction

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The West of Devers (WOD) project area is located in the Coachella Valley and western portions of Riverside County, and in southwestern San Bernardino County, California.

The purpose of this Nesting Bird Management Plan (Plan or NBMP) is to specify the Southern California Edison (SCE) strategy and specific procedures to comply with applicable federal and state regulations and permits as well as to identify specific mitigation measures pertaining to nesting birds encountered during construction of WOD, and to obtain agency concurrence on the strategy and procedures. The relevant project-specific measures are included herein as they are prescribed in the *West of Devers Upgrade Project Environmental Impacts Report/Environmental Impact Statement* prepared for this project by the *California Public Utilities Commission (CPUC) and the United States Department of Interior, Bureau of Land Management (BLM)*. This is an adaptive management plan that may be revised or modified in consultation with *the CPUC, BLM and the California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS)* to address field conditions, to improve the avoidance, minimization and mitigation measures outlined in this plan, or to address changes in local, state, and federal regulations. The amendment process is described in Section 4.

This Plan includes the following:

- The definition of active and inactive nests
- Establishing species-specific default buffers<sup>1</sup> for construction activities
- Establishing procedures for implementing species-specific default buffers
- Establishing communication protocol for proposed reduction in established species-specific default buffers
- Survey methodology and monitoring procedures,
- Reporting contents, format, and schedule

## 1.1 Project Description

### 1.1.1 Project Purpose Statement

Southern California Edison proposes to construct the West of Devers Upgrade Project (WOD or Proposed Project) to increase the power transfer capability of the WOD 220 kV transmission lines between Devers, El Casco, Vista, and San Bernardino substations. The Proposed Project is needed to facilitate the full deliverability of new electric generation resources being developed in eastern Riverside County, in an area designated by the California Independent System Operator (CAISO) for planning purposes as the Blythe and Desert Center areas. The Proposed Project, planned to be operational by 2020, would be constructed primarily within disturbed rights-of-way (ROW), although limited new ROW would be required. SCE needs to acquire upgraded rights in the reservation trust land (the “Reservation”) of the Morongo Band of Mission Indians (“Morongo”).

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<sup>1</sup> A buffer is a defined area surrounding the nest where most project work activities will not be permitted, to minimize project-related disturbance to nesting. Buffer distances vary according to bird species and other factors, and distances may be adjusted on a case-by-case basis, as described in this Plan.

## 1.1.2 Project Overview

The Proposed Project would upgrade the existing WOD transmission line system by replacing the existing WOD 220 kV transmission lines and associated structures with new, higher-capacity transmission lines and structures; installing new and/or upgraded substation facilities; and making telecommunication improvements (see Section B, Project Description, of the Environmental Impact Report/ Environmental Impact Statement [EIR/EIS] for a complete description of the Proposed Project). In particular, the Proposed Project would:

- Upgrade substation equipment within SCE's existing Devers, El Casco, Etiwanda, San Bernardino, and Vista substations in order to accommodate increased power transfer on the upgraded WOD 220 kV transmission lines. Upgrade SCE's existing Timoteo and Tennessee 66/12 kV substations to accommodate 66 kV subtransmission line relocations.
- Remove and upgrade the following existing 220 kV transmission lines and structures with new transmission lines and structures utilizing double-bundled 1590 Kcmil Aluminum Conductor Steel-Reinforced (2B-1590 ACSR) conductor:
  - Devers–El Casco (approximately 30 miles);
  - El Casco–San Bernardino (approximately 14 miles);
  - Devers–San Bernardino (approximately 43 miles);
  - Devers-Vista No. 1 and No. 2 (approximately 45 miles each);
  - Etiwanda–San Bernardino (approximately 3.5 miles); and
  - San Bernardino–Vista (approximately 3.5 miles).
- Remove and relocate approximately 2 miles of two existing 66 kV subtransmission lines.
- Remove and relocate approximately 4 miles of existing 12 kV distribution lines.
- Install telecommunication lines and equipment for the protection, monitoring, and control of transmission lines and substation equipment.

### 1.1.2.1 Project Activities

Table 1, below, provides a list of typical project activities and their corresponding disturbance level for nesting birds. The disturbance levels in Table 1 were categorized based upon the activities' disturbance to nesting birds observed on previous similar projects and analysis of the following factors. The disturbance level category for any construction activity may be revised by SCE and the agencies on a case-by-case basis to account for site-specific conditions or unforeseen circumstances (e.g., contractors may use equipment or techniques not anticipated here).

- Duration of activity
- Type of equipment used
- Noise Level associated
- Number of personnel needed
- Position of equipment used to complete activity
- Types of helicopters used

Low disturbance level activities generally produce little to no noise, utilize no machinery, create minimal fugitive dust, are short in duration, and cause minimal to no ground or vegetation disturbance. Examples of low disturbance activities are Vegetation Clearing (Hand Tools) and Bird Deterrent Installation. Some

low disturbance level activities such as surveys, staking and flagging, and BMP (best management practice) installation and repairs generate very minimal levels of disturbance compared to other construction activities. These activities are classified in Table 1 as minimal disturbance level activities and do not require the typical buffers that other construction activities necessitate. Minimal disturbance level activities and their applicable buffers are described in greater detail in Section 2.4.2 and Section 2.4.4.

Medium disturbance level activities generally produce some noise, create minimal fugitive dust, utilize light machinery that may cause noise and vibrations, and cause medium ground and vegetation disturbance; however, the activities are relatively stationary and shorter in duration than high disturbance level activities. Light construction machinery is considered to be equipment such as or similar to: power tools, small Bobcats, Ditch Witch, small skid steers, small backhoes, small excavators, boom trucks, and small bulldozers. Vegetation clearing (light machinery), foundation drilling, and grading (hand tools/light machinery) are examples of medium disturbance level activities.

High disturbance level activities generally produce high levels of noise, create fugitive dust, utilize heavy machinery that create noise and vibrations, and cause ground and vegetation disturbance. Heavy machinery is considered to be equipment such as or similar to: cranes, large Bobcats, large bulldozers, large excavators, large skid steers, and motor graders. Vegetation clearing (heavy machinery), tower erection, and tower demolition are examples of high disturbance activities. These high disturbance level activities usually take place over larger areas and for longer durations. Construction activities and typical equipment used are classified in Table 1 and are categorized as a Minimal, Low, Medium and High.

**Table 1. Typical Project Activities and Their Disturbance Levels**

Construction Activity Category	Construction Activity	Disturbance Level
Preconstruction	Environmental Resource Surveys*	Minimal
	Civil Survey*	Minimal
	Construction Staking and Re-staking*	Minimal
	ESA Staking and Re-staking*	Minimal
	Site Visits*	Minimal
	Utility Potholing	Medium
	Bird Deterrent Installation*	Low
Site Preparation	Vegetation Clearing (Hand Tools)	Low
	Vegetation Clearing (Light Machinery)	Medium
	Vegetation Clearing (Heavy Machinery)	High
	Grading (Hand Tools/Light Machinery)	Medium
	Grading (Heavy Machinery)	High
	BMP Installation (Hand Tools)*	Minimal
	BMP Maintenance (Hand Tools)*	Minimal
	BMP Installation (Light Machinery)	Medium
Fence Installation	Medium	

**Table 1. Typical Project Activities and Their Disturbance Levels**

<b>Construction Activity Category</b>	<b>Construction Activity</b>	<b>Disturbance Level</b>
Foundation Construction	Casing/Steel Preparation	Low
	Drilling	High
	Casing/Steel Installation	Medium
	Concrete Pouring	High
	Concrete Finishing/Cleanup (Excluding Grinding)	Low
	Concrete Finishing (Grinding)	Medium
Tower Assembly	Steel Delivery (Truck)	Medium
	Steel Delivery (Helicopter)	Helicopter Buffer
	Assembly (Crane)	Medium
	Assembly (Helicopter)	Helicopter Buffer
Tower Erection	Tower Erection (Crane/Ground)	High
	Tower Erection (Helicopter)	Helicopter Buffer
	Tower Erection (Bolting Only)	Low
	QA/QC Inspection*	Minimal
Wire Stringing	Traveler Installation	Helicopter Buffer
	Remove/Install Insulators	Helicopter Buffer
	Wire Stringing (Ground Equipment)	Medium
	Wire Stringing (Helicopter)	Helicopter Buffer
	Spacer Installation	Helicopter Buffer
	Helicopter Transport	Helicopter Buffer
	Clipping	Medium
	Guard Structure Placement (Truck)	Low
	Guard Structure Installation	Medium
	Guard Structure Removal	Medium
Telecommunications Activities	Pole Removal	Medium
	Pole Installation	Medium
	Installation of Cross Arms	Low
	Insulator Removal/Installation	Low
	Traveler Installation/Removal	Low
	Wire Stringing	Medium
	Fiber Optic Splicing*	Low
	Resistance Testing	Low
Construction Yards	Personnel Meeting	Minimal
	Material Storage	Minimal
	Deliveries	Minimal
Tower Deconstruction	Deconstruction (Crane)	High
	Deconstruction (Helicopter)	Helicopter Buffer
	Steel Salvage	High
	Foundation Removal	High



**Table 1. Typical Project Activities and Their Disturbance Levels**

Construction Activity Category	Construction Activity	Disturbance Level
Restoration	Site Re-contouring (Grading)	High
	Topsoil Replacement	Medium
	Hydraulic BMP/seed application	Low
	Seeding (Hand)	Low
	Seeding (Machinery)	Medium
	Watering	Low
	Herbicide Application	Low
	Weed Removal (Hand)	Low
	Weed Removal (Machinery)	Medium
Substations	(Assume activities will take place within existing disturbance limits, but see Tower Assembly, Tower Erection, Wire Stringing for activities that may occur at locations just within the substation fence.	Low-High
General	Existing Access Road Grading	Medium

\*See Section 2.4.2 and Section 2.4.4

## 1.2 Agency Roles and Responsibilities

The CPUC is the state lead agency responsible for California Environmental Quality Act (CEQA) review and compliance. The BLM is the federal lead agency responsible for National Environmental Policy Act (NEPA) review and compliance. Under CEQA and NEPA, both lead agencies must address the project as a whole. CDFW is responsible for the California Endangered Species Act and the California Fish and Game Code (CFGC), and is the trustee agency for activities affecting wildlife in California. USFWS is responsible for consistency with federal Endangered Species Act, Migratory Bird Treaty Act, and Bald and Golden Eagle Protection Act and is the permitting agency for the Western Riverside Multiple Species Habitat Conservation Plan (WRMSHCP) and the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP).

### 1.2.1 CPUC

CPUC staff have participated in development of the Plan and, upon finalization, will recommend its adoption as a condition of the CPUC’s decision on the Project. In addition, CPUC will review any proposed amendments of the Plan to evaluate their consistency with the Project’s Final EIR/EIS. CPUC staff reviews and approves biologists that will work on the Project. CPUC designated avian consultant reviews nest buffer reduction notifications and requests, and may confer directly with the SCE Biologist, SCE Avian Protection Specialist, Avian Biologists, and Biological Monitors for information on bird behavior at specific nests. In addition, the CPUC monitor may confer with designated SCE construction representative, in coordination with the SCE Biologist, for information about project activities.

### 1.2.2 BLM

BLM staff provides feedback on drafts and amendments of the Plan. BLM staff provides concurrence on the final version of the Plan. In addition, BLM will review any proposed amendments of the Plan to evaluate their consistency with the Project’s Final EIR/EIS and Biological Opinion. BLM staff may confer directly with the SCE Biologist, SCE Avian Protection Specialist, Avian Biologists, and Biological Monitors for information on bird behavior at specific nests.

### **1.2.3 CDFW**

CDFW is a Trustee Agency for fish and wildlife resources (CFGF Sections 711.7 and 1802; and CEQA Guidelines Section 15386), and a Responsible Agency regarding any discretionary actions taken by CDFW (CEQA Guidelines Section 15381). CDFW is a permitting agency for the WRMSHCP and the CVMSHCP. CDFW provides feedback on drafts and amendments and reviews and comments on the final version of the Plan. Buffer reduction requests for special-status species are submitted to CDFW staff for final review in accordance with state and federal regulations. WOD defines a special-status species to be any state or federally listed (threatened, endangered, or candidate) species under CESA (or FESA), California species of special concern (CSS), California “fully protected” species under California Fish and Game Code, California “special animals” and “watch list” species (non-listed special-status species)

### **1.2.4 USFWS**

USFWS is responsible for consistency with the federal Endangered Species Act, Migratory Bird Treaty Act, and Bald and Golden Eagle Protection Act and is a permitting agency for the WRMSHCP and the CVMSHCP. USFWS provides feedback on drafts and amendments of the Plan. USFWS staff provides concurrence on the final version of the Plan.

## **1.3 Regulatory Setting**

There are a number of federal and state laws that protect birds and their nesting activities. The applicable regulations and permits are summarized below along with the applicable Final EIR/EIS APMs and MMs, which together provide the regulatory framework within which WOD must comply. In the event regulations impacting nesting birds are revised prior to or during implementation of WOD, the Plan may be modified to reflect these revisions. Proposed revisions to this Plan will be provided to the reviewing agencies as described in Section 4.

### **1.3.1 Federal Regulations**

#### **1.3.1.1 Federal Endangered Species Act**

The Federal Endangered Species Act (FESA) and its subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. FESA Section 9 lists activities that are prohibited by the act. For example, unauthorized “take” of any listed species is prohibited. FESA defines take as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. No take of federally listed endangered or threatened species is proposed in this plan. See applicable permits and consultation documents for direction on these species.

#### **1.3.1.2 Migratory Bird Treaty Act**

The federal Migratory Bird Treaty Act (MBTA) makes it unlawful, except as formally permitted, to take (pursue, hunt, take, capture, or kill) migratory birds except under permits for special situations such as imminent threat to human safety or scientific research. The law currently applies to more than 1,000 species, including most native birds, and covers the destruction or removal of active nests of those species.

### 1.3.1.3 Bald and Golden Eagle Protection Act

Bald and golden eagles, their eggs, and their nests receive additional protection under the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250 and Amendments). The BGEPA states “no person shall take, possess, sell, purchase, barter, offer for sale, transport, export, or import any bald or golden eagle alive or dead, or any part, nests or eggs, thereof without a valid permit to do so.”

## 1.3.2 State of California Regulations

### 1.3.2.1 California Fish and Game Code<sup>2</sup>

**Section 2050 et seq. – California Endangered Species Act.** The California Endangered Species Act (CESA) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA is administered by the CDFW and prohibits the take of any species that the California Fish and Game Commission determines to be a threatened or endangered species. The CESA also mandates that, “state agencies should not approve projects as proposed which would jeopardize the continued existence of any endangered species or threatened species,” if reasonable and prudent alternatives are available that would avoid jeopardy. The CDFW administers the act and authorizes take through California Fish and Game Code Section 2081 Incidental Take Permits or through Section 2080.1 (for species also listed under FESA, consistency determination with Biological Opinion). No take of state listed endangered or threatened species is proposed in this Plan. See the applicable permits and consultation documents for management direction on these species.

**Section 3511 – Fully Protected Species.** The legislature of the State of California designated certain species as “fully protected” prior to the creation of CESA. Section 3511 states that “fully protected” birds or parts thereof may not be taken or possessed at any time. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, mammals, amphibians and reptiles, and birds. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA. The “fully protected” designation applies to several non-listed species in the WOD project vicinity, including golden eagle and white-tailed kite.

**Sections 3503, 3503.5, 3505, 3513 — Birds.** These California Fish and Game Code sections protect all birds, birds of prey, and all nongame birds, as well as their eggs and nests, for species that are not already listed as fully protected and that occur naturally within the state. Sections 3503 and 3503.5 of the CFGC stipulate the following regarding eggs and nests: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by CFGC or any regulation made pursuant thereto; and Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by CFGC or any regulation adopted pursuant thereto. Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

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<sup>2</sup> On August 14, 2015, the CDFW issued a Notice of Proposed Rulemaking on the proposed adoption of regulations addressing nesting birds and birds of prey; the notice also announced a 45-day public comment period closing on September 28, 2015. The discussion of regulations presented herein is consistent with regulations current at the time of publication, and future versions of the Plan should consider the amended regulations adopted by the CDFW.

**CDFW Special Animals List.** “Special Animals” is a broad term used to refer to all the animal taxa tracked by the Department of Fish and Wildlife’s California Natural Diversity Database (CNDDDB), regardless of their legal or protection status. This list is also referred to as the list of “species at risk” or “special-status species.” CDFW considers the taxa on this list to be those of greatest conservation need. The “special-status species” designation applies to several non-listed bird species in the WOD project vicinity, such as loggerhead shrikes and yellow warblers.

In most cases, issues that will arise during construction will be associated with species protection under the MBTA and the California Fish and Game Code sections pertaining to native birds. Therefore, the management strategies presented in this Plan focus on those species protected under these regulations.

### **1.3.3 Local Regulations and Policies**

The Project route crosses two Multiple Species Habitat Conservation Plan (MSHCP) areas. In Riverside County, 18.4 linear miles of the route (Segment 4 and portions of Segments 3 and 5) are within the Western Riverside County MSHCP area and 22 linear miles (Segment 6 and portions of Segment 5) are within the Coachella Valley area. Each MSHCP provides take coverage for certain listed species and other special-status species, under circumstances specified in state and federal take authorization for each MSHCP.

This NBMP does not address nest management for state or federally listed Threatened or Endangered species, or for burrowing owl. Nest management for listed species will be prescribed in a USFWS Biological Opinion, CDFW Incidental Take Permit, or both. Nest management for burrowing owl will be prescribed in a separate Burrowing Owl Management Plan. Nest management for all other non-listed special-status species covered under one or both MSHCPs will be carried out as described in this NBMP. For those species, the provisions of this NBMP will apply throughout the project route, including both MSHCP areas, San Bernardino County, and the Morongo Indian Reservation.

## **1.4 Measures and Conditions from Environmental Documents**

The measures addressed in this Plan are required by the following documents and listed in Table 2.

- West of Devers Upgrade Project PEA (SCE, October 25, 2013)
- West of Devers Upgrade Project Environmental Impact Report/Environmental Impact Statement (CPUC/BLM, Pending)

**Table 2. Applicant Proposed Measures**

Measure	Text of Measure
APM BIO-03	<p><b>Nesting Birds.</b> SCE would prepare and implement a Nesting Bird Management Plan to address nesting birds undertaken in collaboration with the CDFW, USFWS, and BLM. The Plan would focus on an adaptive management approach that may be updated as needed if changes to the plan are identified or conditions in the field change. The Plan would include the following: nest management and avoidance, field approach (survey methodology, reporting, and monitoring), and the Project avian biologist qualifications. The avian biologist would be responsible for oversight of the avian protection activities including the activities of biological monitors.</p> <p>In order to minimize impacts to nesting birds during nesting season, pre-construction surveys and regular sweep surveys of active construction areas by a qualified biologist would focus on breeding behavior and a search for active nests within 500 feet of the project disturbance areas where survey access is not limited.</p> <p>(a) For vegetation clearing that needs to occur during the typical nesting bird season (February 1 to August 31; as early as January 1 for raptors) qualified biologists would conduct nesting bird surveys. If an active nest (e.g., nests with eggs or chicks) is located, the appropriate avoidance and minimization measures from the management plan would be implemented. If it is determined that removal of an active nest is required, the project avian biologist will evaluate the appropriate level of consultation with CDFW, USFWS, and BLM;</p> <p>(b) During the typical nesting bird season, SCE would conduct preconstruction clearance surveys no more than 14 days prior to initial start of construction in accordance with the adaptive management plan, to determine the location of nesting birds and territories;</p> <p>(c) Nest monitoring would be conducted by Project biological monitors with knowledge of bird behavior under the direction of a BLM and/or CDFW approved avian biologist;</p> <p>(d) Nesting deterrents (e.g. mooring balls, netting, etc.) could be used for inactive nests where appropriate at the direction of the Project avian biologist;;</p> <p>(e) A Project avian biologist would determine the appropriate buffer area around active nest(s) and provisions for buffer exclusion areas (e.g. highways, public access roads, etc.) along with construction activity limits... Unless restricted by the Project avian biologist, construction vehicles would be allowed to move through a buffer area with no stopping or idling. The Project avian biologist would determine, evaluate, and modify buffers as appropriate based on species tolerance and behavior, the potential disruptiveness of construction activities, and existing conditions; and</p> <p>(f) The Project biological monitor(s) would observe and document established buffer areas around active nest(s) during project activities. The active nest site and applicable buffer would remain in place until nesting activity concluded. Nesting bird status reports would be submitted according to the management plan.</p>

## 1.5 Measures/Conditions and Project Phases

The measures described in this Plan are applicable for the following periods of the Project, as shown in Table 3.

**Table 3. Timing of Applicant Proposed Measure and Applicability**

Measure	Period		
	Preconstruction (Mobilization)	During Construction (Active)	Post-construction (Restoration) <sup>1</sup>
APM BIO-03	☒	☒	☐
DEIR/DEIS MM WIL-1c	☒	☒	☒

1. Operations and Maintenance will be conducted in accordance with all applicable rules and regulations.

## 2. Management for Nesting Birds

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### 2.1 Management Summary

When practicable, WOD activities will be conducted outside of the nesting season in the project area. However, this Plan focuses on managing nesting birds and nests both outside of and during the nesting season. Management of nesting birds means avoiding or minimizing project activities that have the potential to cause active nest failures as well as to minimize or avoid construction delays. Protecting active nests involves establishing construction disturbance-free buffers within which construction activities are restricted. Establishing and maintaining buffers is designed to prevent take of active nests, eggs, nestlings, or nesting birds as a result of construction activities. Tolerance to disturbance can vary from one bird species to another. Therefore, it is feasible to establish species-specific, or family/group-specific, variances to default buffers that would allow successful nesting of these groups, while reducing constraints on construction activities. This Plan details buffers per species or family/group (see Table 4). Nest buffers for avian species listed under CESA and FESA as specified in the Final EIR/EIS are not addressed in this Plan. Nest management for these listed species will conform to any applicable conditions or requirements adopted by the lead agencies or permitting agencies, including conditions of the CPUC's Decision, BLM's Record of Decision, Biological Opinion, Incidental Take Permit, Coachella Valley Multiple Species Habitat Conservation Plan, and Western Riverside Multiple Species Habitat Conservation Plan.

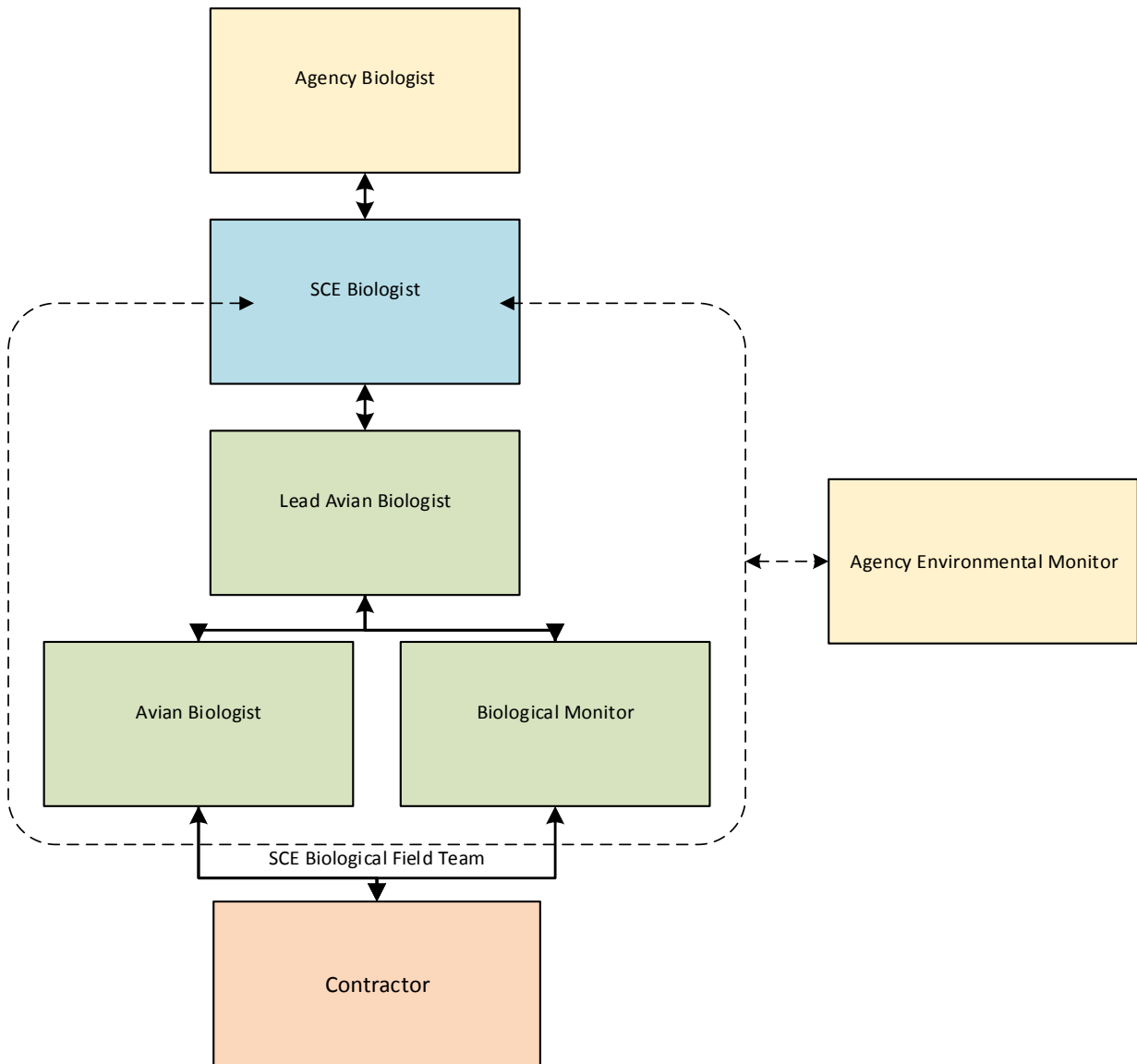
This section describes the definition of an active nest, determination, and implementation of reduced species-specific or family/group-specific default buffers, implementation of nest buffers, nesting bird deterrent methodologies, and the removal of inactive nests.

#### 2.1.1 Management Roles and Responsibilities

The following describes the roles and responsibilities of the persons discussed in this Plan in determining active nests and implementing the appropriate default buffers or buffer reductions. Figure 1 presents the flow of information between roles on this Project. SCE's average qualifications for Avian Biologist and Biological Monitor described in this Plan are included in Section 3.1.2, below.

- **SCE Biologist:** Evaluates and approves Bird Nest Events (i.e., nest records) in the Field Reporting Environmental Database (FRED), default buffers and contractor-initiated buffer reduction requests to be implemented per this Plan; will be primary point of contact with CDFW, USFWS, CPUC, and BLM regarding active nests, default buffers, and reduced buffers; regularly reviews and critiques the FRED nesting bird database (i.e., Bird Nest Events) and submits reports to CDFW, USFWS, CPUC, and BLM. Reviews and approves the Avian Biologist's conservation recommendations and directs the contractor to implement them; confers directly with agency staff regarding project activities, bird behavior, and nest locations.
- **Avian Biologist:** Searches for and identifies active bird nests; documents behavior to evaluate appropriate default buffer (for species such as red-tailed hawk with more than one default buffer); recommends buffer reduction distances as appropriate and communicates these to the SCE Biologist; the avian biologist may also recommend indirect impact reductions, such as establishing no parking/stopping/loitering zones or chick fencing for ground-nesting precocial species; approves buffers larger than standard buffers; determines when a nest is active or no longer active based on personal observations or those of the Biological Monitor (including all nests located at any time during project survey efforts); tracks and updates the Bird Nest Events in FRED. May also erect any required Environmentally Sensitive Area (ESA) staking and fencing around an active nest. Confers directly with agency staff regarding bird behavior at specific nest locations.





**Figure 1. Avian Monitoring Communication Flow**

- Biological Monitor:** Responsible for monitoring compliance during construction activities, documenting non-compliances and wildlife species observations. Establishes any required ESA staking and fencing around an active nest following guidance provided by the Avian Biologist and the SCE Biologist; assists with monitoring nests and adjacent construction activities under supervision of the Avian Biologist; conducts regular sweeps to search for and identify additional nests; communicates regularly with the Avian Biologist about any nesting bird behaviors observed; reports observations and recommendations of nest activity and inactivity; and creates new and updates existing Bird Nest Events in the FRED. Confers directly with agency staff regarding bird behavior at specific nest locations.

## 2.2 Nest Definitions

### 2.2.1 Active Nest

Birds and their nests are protected in the state of California by both state and federal law. At the federal level, the MBTA states:

*it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or eggs of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof.*

At the state level, California Fish and Game Code Section 3503 states:<sup>3</sup>

*It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.*

California Fish and Game Code Section 3503.5 states:

*It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.*

While MBTA does not clearly define what an active (or inactive) nest is, the USFWS (USFWS, 2003) has clarified that the federal regulations do not pertain to the destruction of nests alone (without birds or eggs), provided that possession of the nests does not occur and the activities do not otherwise result in take of migratory birds covered by the MBTA. CDFW has not provided clarification on the regulations pertaining to nesting birds. California Fish and Game Code 3503 provides protection of nests and eggs from “needless” destruction. Therefore, for purposes of this Plan, non-raptor, non-special-status species nests without eggs or chicks are considered inactive. For raptors and special-status species, a nest is considered active upon initiation of construction or when raptors exhibit “nest decorating” behavior. The initiation of nest construction will be determined by an Avian Biologist based upon field observations of the activity at each nest.

Because a moderate number of avian species never “build” nests, special attention will be provided to potential nests, known old nests, and the behavior of adults of any member of the orders Strigiformes (owls), Caprimulgiformes (nightjars), Cathartidae (new world vultures) or families in the order Falconiformes (diurnal birds of prey) including Falconidae (falcons), and Accipitridae (eagles, hawks, and kites), and some ground-nesting species (e.g., killdeer). The determination of an active nest will be made by the Avian Biologist with a minimum observation time as described below.

### 2.2.2 Inactive Nest

For the purpose of implementing this Plan, non-raptor and non-special-status species nests that are under construction will be considered inactive until eggs are present within the nest. Non-listed special-status species nests will be considered active during the nest building phase.

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<sup>3</sup> See footnote 2 for information regarding proposed amendments to the CFGC.

A previously active nest becomes inactive when it no longer contains viable eggs and/or living young and is not being used by a bird as part of the reproductive cycle (eggs, young, fledging young still dependent upon nest). Egg inviability will be inferred if eggs are present or believed present, but the adult birds have stopped brooding the eggs or abandoned the nest, based upon repeated observations of inactivity at the nest location when required. In some cases, a nest can be abandoned by the bird constructing it and become inactive prior to egg laying. In such cases, determination that the nest is inactive is made on a case-by-case basis based on consistent observations and the determination of an Avian Biologist.

## **2.3 Active Nest Avoidance and Documentation**

During construction of the WOD Upgrade Project, the Avian Biologists, Biological Monitors and the SCE construction team will work together to avoid or minimize impacts to active nests. The principal means of avoiding or minimizing impacts will be to establish designated areas (“buffers”) surrounding each nest, where most project activities will not be authorized. When work activities are required adjacent to an active nest, the SCE construction team will work with the SCE biology team and the agencies to determine whether the following default buffer distances may be modified to minimize impacts to the nest while allowing work to proceed.

### **2.3.1 Determination of Species-specific or Avian Group/Family Specific Buffers**

The recommended default buffers around active nests for the various groups of birds depicted in Table 4 are the recommended distances at which construction activities can occur without disturbing the nest, adults and/or young to the point of potential nest failure. The default buffers established in Table 4 will be applied, unless a specific change is approved by the Avian Biologist to increase or decrease the buffer on a case by case determination based on the behavior of the bird and planned project activities. The procedures for buffer reductions (i.e., decreased distances) are described in this section below and in Section 2.3.3.

It is important to emphasize that species-specific buffers are measured from the nest to the site of the construction activity outwards (horizontally for ground or helicopter activities) or upwards (vertically for helicopter activities), as appropriate, and accounts for the nest’s location, including the height of the nest (see Figures 2, 3, 4, and 5). Upon discovery of an active nest the Biological Monitor shall mark the cylinder-shaped buffer area by ESA signage or markings on the work site, based on horizontal distance from the nest location. The buffer distances in the figures are for illustration purposes only; please see Table 4 for species specific default buffers.

#### **2.3.1.1 Ground Based Construction Activities**

A cylinder-shaped default buffer (Figures 2 and 3) will be established around active nests prior to the initiation of ground based construction activities or upon discovery of a new active nest by the Biological Monitor or Avian Biologist. The default buffer distance established around a particular nest will be species-specific, according to the established buffer distances in Table 4.

#### **2.3.1.2 Helicopter Based Construction Activities**

Helicopter activities typically include moving crews, moving equipment, moving materials, construction activities, and wire stringing/removal. The duration of helicopter use varies based on activity, type of construction, and terrain.

## Ground Construction Buffers

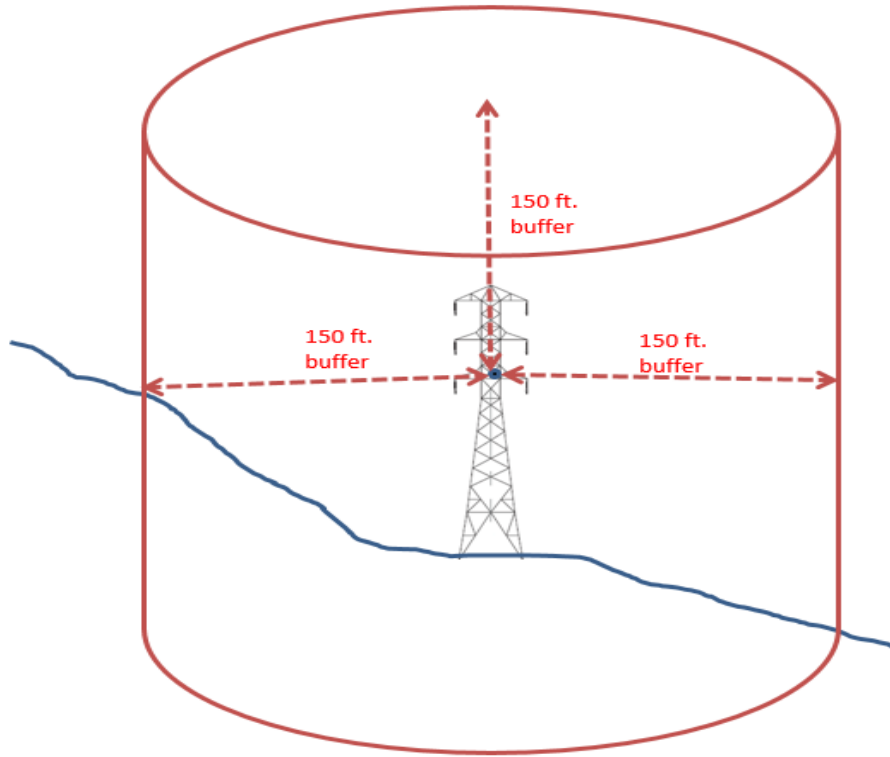
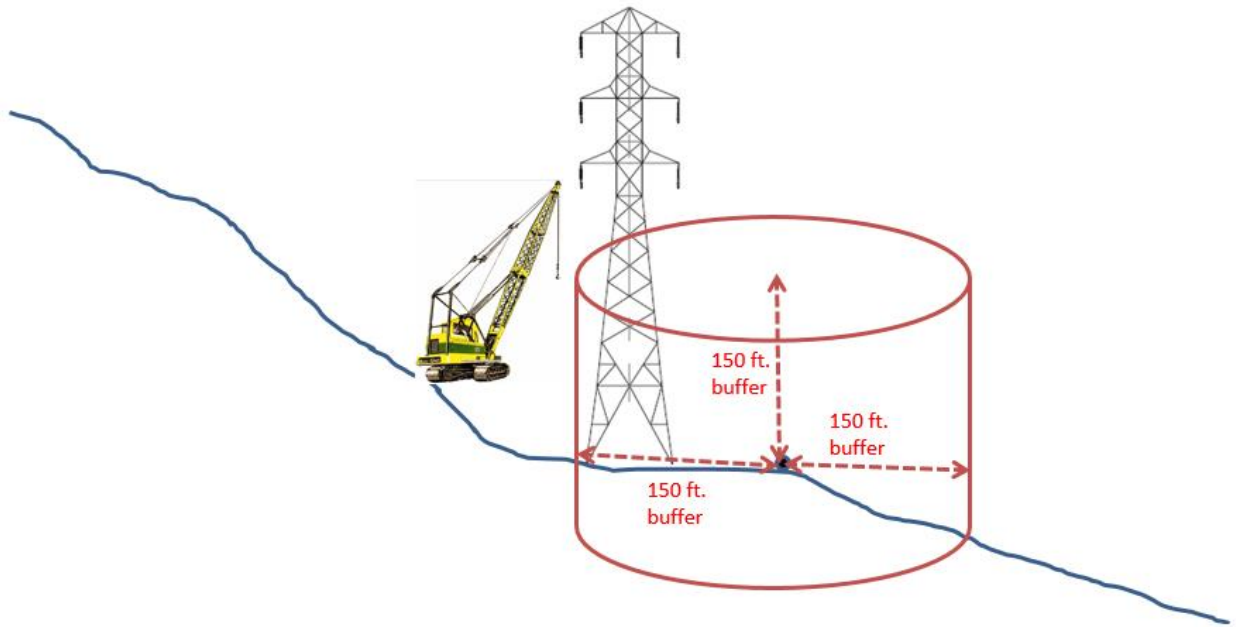


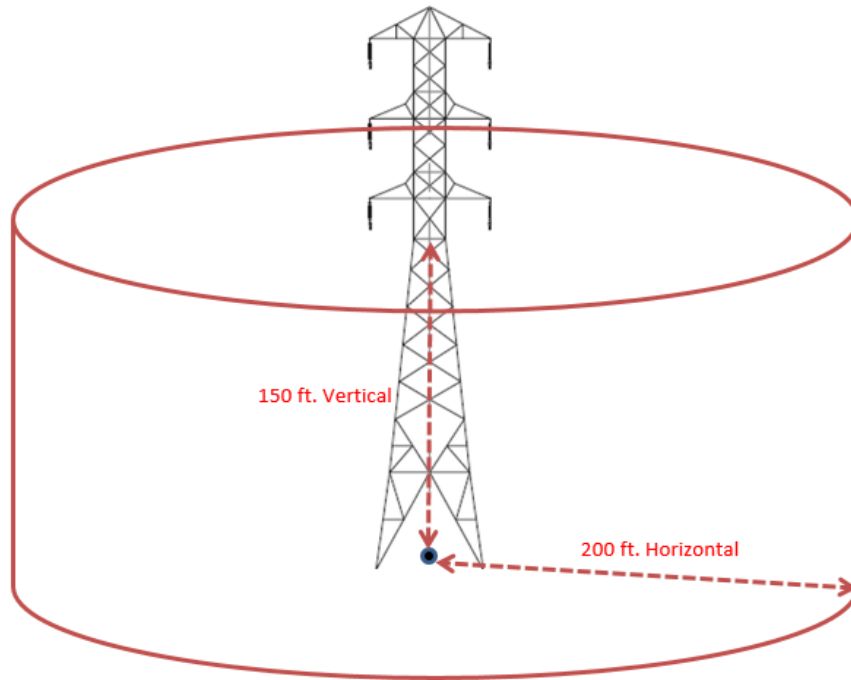
Figure 2. Example of Cylindrical Ground Construction Buffers for Nest in a Structure

### Ground Construction Buffers



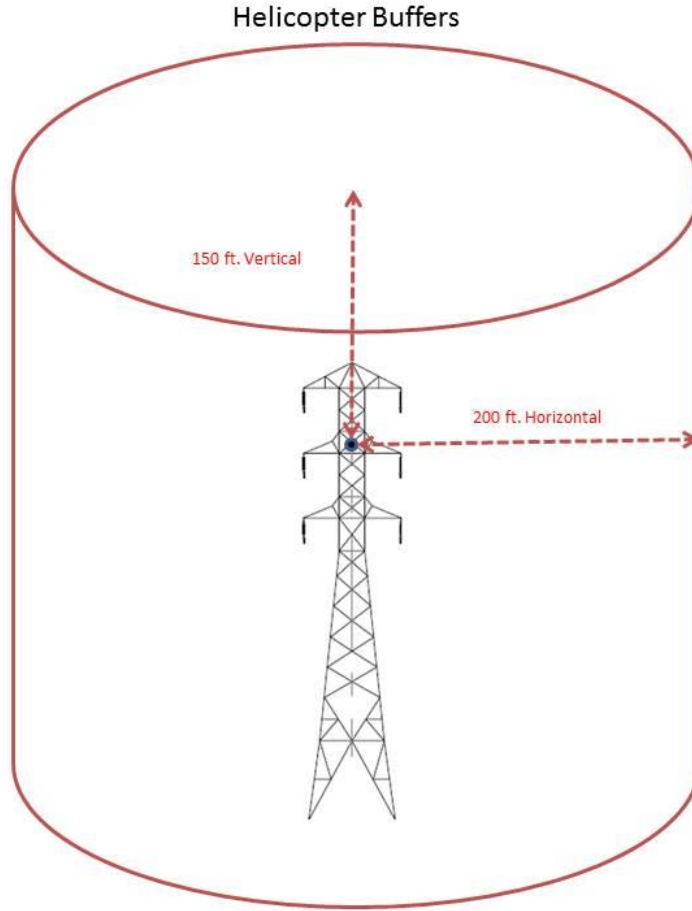
**Figure 3. Example of Cylindrical Ground Construction Buffers for a Nest  
Nearby Construction Activities**

## Helicopter Buffers



**Figure 4. Example of Helicopter Buffer When Nest Is on the Ground**





**Figure 5. Example of Helicopter Buffers When a Nest Is Located Within the Tower**

Cylinder-shaped horizontal and vertical default buffer distances will be established for helicopter construction activities according to the distances established in Table 4 due to the limitations of the Geographical Positioning System (GPS) units on the helicopter. Project Team members shall monitor the helicopter tracks (flight patterns and durations) daily to ensure compliance with established helicopter buffers and document any non-compliances. SCE shall retain helicopter track data and provide the agencies with these tracks when requested.

In many respects, helicopter construction work is similar to heavy ground-based construction activity. Therefore, the horizontal species-specific default buffers established for helicopter construction activity are greater than those for light ground-based construction activity (see Table 4, Column 4). The only exception is for raptors in Category 3, for which a 300-foot species-specific default buffer is adequate under most circumstances for both ground-based and helicopter construction activities.

Vertical species-specific default buffers established for helicopter work are also greater than for ground-based construction work in most cases (Table 4), although generally not as great as the horizontal helicopter species-specific default buffers. The species-specific default buffers provided in this Plan may need to be adjusted based on site-specific and nest-specific observations in the field. The vertical species-specific default buffers take into account the effects of rotor wash from the smaller helicopters proposed for use on WOD, which typically cause a down draft of 15 to 18 miles per hour (mph) at up to 150

feet. Larger-sized helicopters with greater rotor wash could require larger buffers. For exposed nests, vertical default buffers will be modified accordingly, based on site-specific conditions recorded in the FRED.

The duration and frequency of activity in the vicinity of a nest should also be taken into consideration when evaluating whether or not the buffer requirement is met. The default buffers were established based on construction activities that are temporary or infrequent in nature. If a construction crew will be working in the vicinity of an active nest for an extended period depending on the nature of the work (an extended period can be defined as a few minutes for heavy construction or helicopter work to an hour or more for light construction), then the Avian biologist may determine that species-specific default buffer is insufficient for the nest and adjust the distance appropriately. The helicopter species-specific buffers assume that the helicopter will only be present in the area for a brief period adjacent to the nest, typically less than a minute, and that it will only visit the site once in a day, or once in the early morning and again in the late afternoon. This time frame is consistent with most types of anticipated helicopter use on the project. Helicopter flight track data will be reviewed by project team members as described above, to confirm helicopter activity periods near nests.

The vertical helicopter buffers are projected on the GPS displays in all helicopters based upon the elevation from sea level. The elevation of each nest is taken during the initial determination of “active nest.” The location of the nest in relation to the biologist taking the GPS coordinates is also added to the buffer prior to the nesting data being pushed to the helicopters daily. For example, to maintain a vertical species-specific default buffer of 100 ft. for a nest that is 100 ft. off the ground in a tower arm will appear in the GPS as a 200 ft. buffer from the ground elevation.

In Table 4, some species fall into more than one category and may therefore have more than one species-specific buffer associated with it. A blue-gray gnatcatcher (*Polioptila caerulea*), for example, nesting in a thicket or understory is less likely to be disturbed than one nesting in a more exposed location in a shrub or small tree even though both nests are the same distance from the construction activity. Likewise, a red-tailed hawk (*Buteo jamaicensis*) that has acclimated to human activities is less likely to be disturbed at its nest (and thus placed in Birds of Prey Category 2) than one that is not accustomed to human activity (placed in Birds of Prey Category 3). The category for each nest will be determined by the Avian Biologist based upon location of the nest relative to surrounding commercial, residential areas, or other activities, as well as, the bird’s documented tolerance to human activity observed during field observations. For specific construction activities, sound monitoring information may be used during analysis of potential impacts from construction-related activity. For similar reasons, birds assigned to a category based on their nesting habits are not all likely to have similar thresholds of disturbance. In these instances, a range of species-specific buffers is indicated in Table 4.

Default buffers consider species tolerances for disturbance, if known. Larger default buffers are used for large avian species and for species that are not tolerant of disturbance. Smaller default buffers are generally used for smaller avian species and also species that have a high tolerance for disturbance, such as those that are commonly found nesting close to development. Several species have been identified as common species that use the electric power transmission structures (Lattice Steel Towers) or build nests in or on equipment that is stored at a site. These include some red-tailed hawks, common ravens, western kingbirds, Cassin’s kingbirds, and house finches.

Appendix A<sup>4</sup> provides relevant natural history information for species with the potential to nest in the project area. Appendix B provides additional information on special-status species and their sensitivity to construction. Biological Monitors will have this Plan in their possession to refer to individual species to assist in determining appropriate buffers in the field for specific construction activities. There may be instances where a bird may be showing signs of agitation and the buffer may need to be increased. The Avian Biologist will approve increases to buffer sizes as needed.

**Table 4. Buffers for Horizontal and Vertical Ground and Helicopter Construction**

Avian Group (nest type /location)	Species Potentially Nesting within WOD Limits and Survey Area <sup>1</sup>	Minimum Buffers for Ground Construction Per Disturbance Level (feet)	Horizontal Buffer for Helicopter Construction (feet)	Vertical Buffer for Helicopter Construction (feet) <sup>2</sup>
Waterfowl and rails	Canada goose, wood duck, mallard, cinnamon teal, ruddy duck, Virginia rail, sora, American coot, pied-billed grebe	150	300	150
Quail	California quail, Gambel's quail	150	200	150
Hérons	Great blue heron, great egret, snowy egret, cattle egret, black-crowned night-heron	250	500	300
Birds of prey (category 1)	American kestrel, barn owl, western screech-owl	300	200	150
Birds of prey (Category 2)	Osprey, Cooper's hawk, red-tailed hawk (2); some urban/suburban), red-shouldered hawk, great horned owl, burrowing owl <sup>3</sup>	300	300	200
Birds of prey (Category 3)	Turkey vulture, red-tailed hawk (2; some rural/ remote), white-tailed kite, northern harrier, long-eared owl	500	500	300
	Peregrine falcon, prairie falcon,	Consult CDFW & USFWS	Consult CDFW & USFWS	Consult CDFW & USFWS
Eagles	Golden eagle	1 mi line of site 0.5 mi no line of site	1 mi line of site 0.5 mi no line of site	1 mi line of site 0.5 mi no line of site
Shorebirds	Killdeer	200	200	200
Pigeons	Band-tailed pigeon	150	200	200
Doves	Mourning dove, white-winged dove, common ground-dove	150	200	150
Roadrunners	Greater roadrunner	300	200	150
Nightjars	Lesser nighthawk, common poorwill	150	200	150
Swifts	White-throated swift	200	200	150
Hummingbirds	Black-chinned hummingbird, Anna's hummingbird, Costa's hummingbird, Allen's hummingbird	100	200	150

<sup>4</sup> Appendices will include supporting information to this Plan. Reference to appendices were maintained in the Plan to illustrate the type of information that could be included such as forms, species accounts/lists, netting/spike specification sheets, nest platform, Burrowing Owl Management Plan, location of Wildlife rehabilitation, bird nest data summary, and other information.

**Table 4. Buffers for Horizontal and Vertical Ground and Helicopter Construction**

Avian Group (nest type /location)	Species Potentially Nesting within WOD Limits and Survey Area <sup>1</sup>	Minimum Buffers for Ground Construction Per Disturbance Level (feet)	Horizontal Buffer for Helicopter Construction (feet)	Vertical Buffer for Helicopter Construction (feet) <sup>2</sup>
Woodpeckers	Acorn woodpecker, ladder-backed woodpecker, Nuttall's woodpecker, downy woodpecker, northern flicker	150	200	150
Passerines (cavity and crevice nesters)	Say's phoebe, ash-throated flycatcher, brown-crested flycatcher, tree swallow, rock wren, canyon wren, house wren, Bewick's wren (2), mountain chickadee, oak titmouse, western bluebird	100	150	100
Passerines (bridge, culvert, and building nesters)	Black phoebe, Say's phoebe, northern rough-winged swallow, cliff swallow, barn swallow, house finch (3)	100	150	100
Passerines (ground nesters, open habitats)	Horned lark, rock wren, western meadowlark, orange-crowned warbler, lark sparrow, grasshopper sparrow	150	200	150
Passerines (understory and thicket nesters)	Bushtit, Bewick's wren (2), blue-gray gnatcatcher (2), black-throated gray warbler, yellow-breasted chat, spotted towhee, black-chinned sparrow, sage sparrow, song sparrow, black-headed grosbeak, blue grosbeak, lazuli bunting, American goldfinch	150	200	150
Passerines (shrub and tree nesters)	Pacific-slope flycatcher, Cassin's kingbird, western kingbird (2), loggerhead shrike (2),* Hutton's vireo, western scrub-jay, American crow, common raven, verdin, bushtit, black-tailed gnatcatcher, blue-gray gnatcatcher (2), cactus wren (2),* American robin, northern mockingbird, Le Conte's thrasher, phainopepla, yellow warbler, black-throated gray warbler, yellow-breasted chat, California towhee, black-throated sparrow, song sparrow, summer tanager, great-tailed grackle, hooded oriole, Bullock's oriole, house finch (3), Lawrence's goldfinch, lesser goldfinch	150 (300 for species marked with an *)	200	150
Passerines (open scrub nesters)	Loggerhead shrike (2),* verdin, cactus wren (2),* black-tailed gnatcatcher, wren tit, northern mockingbird, California thrasher, Le Conte's thrasher, Phainopepla, orange-crowned warbler, southern rufous-crowned sparrow, California towhee, black-throated sparrow, Brewer's blackbird, lesser goldfinch	150 (300 for species marked with an *)	200	150
Passerines (tower nesters)	Western kingbird (2), common raven, house finch (3)	150	200	150
Passerines (marsh nesters)	Common yellowthroat, red-winged blackbird, tricolored blackbird,* great-tailed grackle	150 (300 for species marked with an *)	200	150

**Table 4. Buffers for Horizontal and Vertical Ground and Helicopter Construction**

Avian Group (nest type /location)	Species Potentially Nesting within WOD Limits and Survey Area <sup>1</sup>	Minimum Buffers for Ground Construction Per Disturbance Level (feet)	Horizontal Buffer for Helicopter Construction (feet)	Vertical Buffer for Helicopter Construction (feet) <sup>2</sup>
Species not covered under MBTA.	Domestic waterfowl, including domesticated mallards, feral (rock) pigeon, ring-necked pheasant, chukar, Eurasian collared-dove, spotted dove, parrots, parakeets, European starling, house sparrow	NA	NA	NA

1. For species listed under two or more categories, the number of categories is indicated in parentheses, e.g., “red-tailed hawk (2).”
2. Standard distances applicable only to small helicopters, which typically cause a down draft of 15 to 18 mph at up to 150 feet, operating in nest vicinity for up to 3 minutes once or twice per day, with a minimum of 4 hours between helicopter activities. Larger helicopters or longer work periods will require additional agency review.
3. Burrowing owl buffers will be specified in a separate Burrowing Owl Management Plan.

### 2.3.2 Implementation of Species-Specific Buffers

This section describes the process of implementing species-specific default buffers for active nests. Species-specific nesting buffer implementation during construction will be designed to avoid take of an active nest. Buffers implemented for each particular nest may be greater than the buffers detailed in this Plan (Table 4) if deemed necessary by the Avian Biologist. Implemented buffers for non-special-status species may be reduced to smaller buffers than detailed in the Plan (Table 4), on a case by case basis as determined by an Avian Biologist as described in section 2.3.3.1, below.

When an active nest is discovered during a preconstruction survey, a Biological Monitor will delineate the buffer area and restrict construction as necessary per the species-specific default buffer (Table 4). A Biological Monitor will document the individual behavior of the bird; the stage of the reproductive cycle; and the site conditions. Section 3 provides survey methods for identifying nests within the Project area.

In the event an active nest is detected by a Biological Monitor during construction activities at a specific work site during a work day, construction activities will be suspended and the species-specific default disturbance-free buffer will be established around the active nests. Demobilization activities, for work that was occurring inside the disturbance free buffer prior to the identification of the active nest, will be allowed within the buffer in order for field personnel and equipment to vacate the affected work site utilizing approved access roads and maintain vehicle speeds under 15 miles per hour, in a timely manner once the site has been secured and can be left safely. Monitoring of the nest will continue to track the status and stage of the nest site. The Avian Monitor or Biological Monitor will observe and record the work suspension and demobilization activities.

For ground-based construction activities, vertical separation of the nest from the construction area may be considered when selecting the appropriate horizontal buffer. Some species build their nests very high in trees and structures. For example, a common raven nest 150 feet off the ground in an existing structure is less likely to be affected by ground work occurring directly below than a nest 50 feet off the ground. The horizontal and vertical buffers will be implemented using the guidelines as described in Section 2.3 of this Plan.

For species such as red-tailed hawk with two or more default buffer distances, the default distance will be determined by site-specific conditions. For these species, the habitat and infrastructure surrounding a nest location will be evaluated for its ability to provide a visual and/or acoustic barrier to construction.

This information will be used to help determine the appropriate avian group from Table 4 for implementation of the default buffer.

The observed behavior of an individual bird during the nest search process and consequent nest monitoring will help determine the appropriate buffer distance. For example, an incubating adult that appears more skittish and is readily disturbed could receive a larger buffer than an incubating adult that sits tight and appears more acclimated to disturbance.

Generally, nesting birds are most susceptible to failure early in the nesting cycle when fewer resources have been invested towards the nest. Therefore, it is more important to reduce disturbances during egg laying rather than later in the nesting cycle, which could result in the determination of a larger buffer being necessary early on, then reducing its size later in the nesting season.

Extreme weather events may produce conditions that would increase the likelihood of nest failure. Combined with the stress of nearby construction activity, a nest might fail that would otherwise succeed. On unseasonably hot, cold, or windy days, species-specific buffers *may* need to be temporarily increased.

Information will be maintained in the FRED for all nests identified within active WOD construction areas. At a minimum, for each nest, the following information will be documented:

- Status (active or inactive)
- Species
- Nest location including nest height
- Behavioral observations
- Site conditions
- Nest exposure
- Estimated date of nest establishment
- Estimated fledge date
- Buffer size implemented

To avoid take of active nests whose buffer areas overlap active construction areas or access roads, an Avian Biologist or Biological Monitor will implement and maintain the established default ESA buffer, monitor adjacent construction activities, and document the nesting birds' behavior observations and active nest status. SCE will ensure that the construction contractor is made aware of the ESA buffers through the use of construction maps outlining environmental and biological constraint areas, flagging, staking and signage, and direct communication in the field. Nest Monitoring will be discussed in more detail in Section 3.3 below.

### 2.3.3 Buffer Reductions

For project activities of any disturbance level that are inconsistent with established buffer distances, the SCE Biologist and Avian Biologists will evaluate the proposed activity on a case by case basis. Where appropriate, they may work with the construction team to revise a buffer reduction request to minimize potential impacts to nesting birds. A reduced buffer distance, as outlined below, may be implemented if recommended by the Avian Biologist and approved by the SCE Biologist. For common species, SCE will notify the agencies of each buffer reduction. For special-status species, SCE will submit a request for agency review of any proposed buffer reduction. This Plan does not include a buffer reduction procedure for listed threatened or endangered species. Buffer reduction for listed species will be issued by CDFW and/or USFWS only.



For each proposed buffer reduction, an Avian Biologist will be consulted and will determine whether the default species-specific buffers (Table 4) may be reduced for the specific activity and duration associated with the active nest. An Avian Biologist will make this determination based on the information provided by a Biological Monitor, the species' natural history, and its known tolerances including those observed during SCE nesting bird management on WOD. If a reduced species-specific buffer can be implemented, the SCE biologist will be consulted prior to the reduction of the default buffer. Buffer reductions will take place only after consideration of site-specific conditions such as distance to construction, type of disturbance activity, anticipated duration of the disturbance, microhabitat at the location of the nest that may provide visual and acoustic barriers, behavior of the pair, and its reproductive stage

### **2.3.3.1 Common Species Buffer Reductions**

For common species, buffers listed in Table 4 may be reduced to smaller buffers through the following notification process:

1. The Construction Contractor will file a buffer reduction request to the SCE biologist, describing the proposed work activity within the default buffer area, reason the activity must be completed while the nest remains active, and total period of proposed buffer reduction.
2. Once a request for a buffer reduction is received from the Construction Contractor, the SCE Biologist will review the nest status and the need for the reductions with the contractor or construction manager. Potential avoidance of the buffer reduction will be evaluated (e.g., by staging equipment in a different location). Wherever feasible, proposed work activities and locations will be adjusted to avoid or minimize incursion into the buffer area.
3. The SCE Biologist, SCE Construction team, and Avian Biologist will evaluate the request and determine whether a reduced buffer can be applied. The decision will be based on the documented nest information and site-specific conditions such as distance to construction, type of disturbance activity, anticipated duration of disturbance, microhabitat at the nest location that may provide visual and acoustic barriers, behavior of the pair, its reproductive stage, the species' natural history, species' known tolerances to human presence and activities, proposed buffer reduction distance and start and end dates, and anticipated work activities and durations. If determined to be acceptable by the SCE team, the SCE Biologist will submit a buffer reduction notification to the CPUC, BLM, USFWS, and CDFW. The following will be included in the notification:
  - Complete description of activities proposed within the reduced buffer, including types of equipment, duration, and start date
  - Description of project activity in the vicinity of the nest within the last 30 days
  - Identification of the current and reduced buffers
  - Map showing current and reduced buffers
  - Nest activity, location, topography or other features that may shield the nest from the work area,<sup>5</sup> the pair's response to the biologist, and photos
  - Assessment made by the Avian Biologist
  - Description of monitoring if different from the monitoring protocol described within the Plan

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<sup>5</sup> Throughout this NBMP, "work area," "active work area," "construction area," or "active construction area" refer to the construction work limits as approved by the CPUC and BLM.

- Statement regarding returning to the established default buffer after work has been completed in the reduced buffer area.
4. The SCE Biologist will notify the Avian Biologist and the Biological Monitor. The Biological Monitor will modify the ESA markers to the new buffer distance. The SCE Biologist will modify the buffer distance, upload the notification information, document the notification and concurrence (if applicable) dates in the FRED.
  5. As the work activity is initiated, the Avian Biologist will monitor the nest long enough to determine how the nesting pair is responding to the disturbance activity. If necessary, the avian biologist will adjust the buffer accordingly to minimize disturbance at the nest.
  6. If the activities described in the notification do not begin within seven calendar days or if project activities change to a higher level of disturbance, the nest will be re-evaluated and an updated buffer reduction notification will be submitted for the proposed activities.

Once the project activity is complete, the buffer will revert back to the original established buffer. The Biological Monitor will adjust the ESA markers and the SCE Biologist will update the nest record in the FRED.

### **2.3.3.2 Special-Status Species Buffer Reductions**

Buffers listed in Table 4 for special-status species may be reduced to smaller buffers through consultation with the appropriate resource and land management agencies (refer to Appendix A). This NBMP does not address buffers or buffer reductions for listed threatened or endangered species. Project activities that may affect those species will be regulated according to conditions of the project's Biological Opinion, Incidental Take Permit, CVMSHCP, and WRMSHCP. If a buffer for a special-status species nest impedes Project activities, a reduced buffer may be implemented according to the following process:

1. The Construction Contractor will file a buffer reduction request to the SCE biologist, describing the proposed work activity within the default buffer area, reason the activity must be completed while the nest remains active, and total period of proposed buffer reduction.
2. Once a request for a buffer reduction is received from the Construction Contractor, the SCE Biologist will review the nest status and the need for the reduction with the contractor or construction manager. Potential avoidance of the buffer reduction will be evaluated (e.g., by staging equipment in a different location). Wherever feasible, proposed work activities and locations will be adjusted to avoid or minimize incursion into the buffer area.
3. The SCE Biologist, SCE Construction team, and Avian Biologist will evaluate the request and determine whether a reduced buffer can be applied. The decision will be based on the documented nest information and site-specific conditions such as distance to construction, type and anticipated duration of construction, microhabitat at the nest location that may provide visual and acoustic barriers, behavior of the pair, its reproductive stage, the species' natural history, species' known tolerances to human presence and activities, proposed buffer reduction distance and start and end dates, and anticipated work activities and durations. If determined to be acceptable, the SCE Biologist will submit a buffer reduction request to CPUC, CDFW, BLM, and USFWS.
4. Once a buffer reduction receives concurrence by CDFW, the SCE Biologist will notify the Avian Biologist and the Biological Monitor. The Biological Monitor will modify the ESA markers to the new buffer distance. The SCE Biologist will modify the buffer distance, upload the approval information, document the request and approval dates in the FRED.

5. As the work activity is initiated, the Avian Biologist will monitor the nest long enough to determine how the nesting pair is responding to the disturbance activity. If necessary, the avian biologist will adjust the buffer accordingly to minimize disturbance at the nest.
6. If the activities described in the request do not begin within seven calendar days or if project activities change to a higher level of disturbance, the nest will be re-evaluated and an updated buffer reduction request shall be submitted for the proposed activities.

Once the project activity is complete, the buffer will revert back to the original established buffer. The Biological Monitor will adjust the ESA markers and the SCE Biologist will update the nest record in the FRED.

### **2.3.4 Accidental Disturbance of Active Nests**

In the event project activities cause abandonment of a nest with eggs or chicks or damage to eggs, chicks, or the nest resulting in a low chance of survival, the eggs or chicks will be transported by a Biological Monitor to the closest wildlife rehabilitation facility able to accept the eggs or chicks and the CPUC, CDFW, BLM and USFWS will be immediately notified (within 24 hours). See Appendix C for a list of permitted wildlife rehabilitation facilities. The final disposition of the eggs or chicks will be reported in the FRED as well as by the SCE Biologist directly to the CPUC, CDFW, and USFWS via email. SCE will cover the cost of the care by the wildlife rehabilitation facility. When incidents like this occur they will be documented as non-compliances and provided to the agencies and included within daily incident email summaries and weekly reports.

## **2.4 Exceptions to Notification Requirements**

The following sections describe construction activities that do not follow the buffer implementation and reduction procedures in Sections 2.3.2 and 2.3.3. In each of the scenarios below, every effort will be taken to avoid take of active nests. These activities are not exempt from nest protection, but are either necessary to ensure public health and safety or are considered such low impact as to be unlikely to cause nest failures. Crews or personnel performing these activities will be made aware of nest locations to avoid impacting these nests.

### **2.4.1 Critical Construction Activities**

Some critical construction activities must be completed to ensure public health and safety, and structural integrity. When an active nest that had not been documented prior to beginning the activity is identified during performance of a critical construction activity, the construction team may complete the necessary task to ensure public health and safety or structural integrity is not compromised. SCE will provide a valid USFWS Special Purpose Utility (SPUT) permit allowing management of nests in emergency circumstances or, if the permit has expired, will provide the expired SPUT and USFWS confirmation that the expired permit remains valid until issuance of a new or renewed permit. The SCE Biologist will follow the notification of USFWS and CDFW required by the permit as well as CPUC and BLM. The Avian Biologist or Biological Monitor will monitor the nest throughout the continuing activity and will work with the construction crew during the activity and demobilization to take action as feasible to minimize impacts to the nest. These actions may include repositioning equipment to take advantage of visual or sound barriers, shutting down unneeded equipment, or minimizing work activities in some portions of the site. Following completion of the activity, the work area will be promptly demobilized and the default buffer distance will be put into place. The list of critical construction activities is included in Attachment L. When incidents like this result in a nest failure, it will be documented as a non-compli-

ance, provided to the agencies, and included within a daily incident email summary, weekly report, and annual report.

#### **2.4.2 Buffer Distances for Access Roads**

Substations, material storage yards, helicopter landing zones, assembly and support yards, contractor yards, and construction areas associated with WOD may be accessed by a single ingress/egress point. These access roads into construction areas are frequently located adjacent to vegetation (e.g., shrubs and trees) or other habitat, including vegetation planted to screen substation facilities, which provide suitable nesting habitat for birds. Implementing buffers for active nests that become established along access roads may restrict access to and construction activities within substations and yards.

In the event of an active nest located less than the default buffer distance from the ingress/egress point, ingress/egress to the project work areas will be managed by the SCE Biologist working with the Avian Biologist to avoid take of an active nest while allowing use of these roads for construction activities. Take of an active nest from vehicular travel along project access roads can be avoided through the implementation of the following management practices:

- The areas along access roads will be surveyed up to 100 feet on either side by the Avian Biologist to document locations of active nests and to assess buffers,
- The speed limit on all project access roads will be restricted to 15 mph or less,
- Vehicles will not stop or idle along project access roads within an active nest buffer if an access road gate lies within an active nest buffer then a brief stop will be allowed for gate opening/closing.
- Avian Biologists or Biological Monitors will place no parking/idling/stopping signs and ESA staking along the road at the limits of nest buffers to avoid impacts,
- Construction personnel will not loiter through or within an active nest buffer,
- Watering of access roads for dust control will be limited to prevent direct watering of an active nest within active nest buffers.

#### **2.4.3 Active Substations and Yards**

Once construction or clearance of vegetation for a yard or substation is complete and the yard or substation is established and is in active operation, buffers for non-special-status species' nests found inside or adjacent to the yard or substation will be determined by an Avian Biologist. The distance will generally be smaller than the default buffer for a given species, in consideration of the project-related disturbance present as the nest was being built. Reduced buffers for nests inside of yards and substations are acceptable for non-special-status species due to acclimation to the regular construction activities. Indirect impacts to the individual nests are not anticipated as work will occur within the yard or substation only. If the activity occurring in the yard may cause accidental nest damage due to the nest location or the nest was built on equipment/materials in the yard then ESA signage will be erected to restrict workers from accidentally disturbing the nest or causing nest failure. However, if a major change in the activity level or activity type within the yard or substation will occur, there may be situations where appropriate nest buffers will be implemented within the yard or substation specific to that activity. Examples may include helicopter use or mobilization of a large piece of equipment, where the Avian Biologist determines it is not reasonable to assume the individual birds are acclimated to the activity. In these situations, these types of activities may occur within the yard or substation but outside the nest buffer. The CPUC, BLM, CDFW, and USFWS will be notified of planned buffer changes and related activity.

## 2.4.4 Minimal Disturbance Activities

Certain minimal disturbance construction activities that would not require establishing a staked-off nest buffer (e.g. staking activities) are listed below and in Table 1. During these minimal impact activities, the crews and supplies would be transported to the construction site via pickup truck; where feasible, the truck will be parked outside the species-specific default buffers in Table 4. However, if necessary crews would access the site on foot. All staking, creation or repair of divots, and removal/replacement of wattles or BMP fencing would be performed by hand using non-power hand tools if necessary; areas will be accessed on foot.

In some cases, these activities include some level of habitat disturbance (e.g., hand vegetation clearing). For those activities, an Avian Biologist will be present and record observations in the monitoring log. These activities include: installation or Repair of Water Quality BMPs, Tower QA/QC Site Finalization Activities, Fiber Optic Splicing at Tower Splice Boxes, and Resistance Testing. Other activities have no ground disturbance or vegetation disturbance. For those activities, a Biological Monitor will be present and record observations in the monitoring log. These activities include: Environmental Resource Studies, Civil Engineering Surveys, Site Visits, Site Staking/Flagging and Re-staking/Re-flagging. For all minimal disturbance activities, ongoing nest surveys would occur to update nests and identify new nests within and adjacent to these construction areas (see Section 3.3).

### Environmental Resource Surveys

Environmental resource surveys include biologists walking transects in the field to collect biological resource information such as special-status plant and wildlife species, vegetation mapping, jurisdictional water mapping and surveys for other environmental resources within the project area.

- A pick-up truck will deliver supplies and the crew to the site, or access will be by foot.
- Where feasible, the truck will be parked outside of the species-specific default (Table 4) nest buffer.

### Civil Engineering Surveys

Civil Engineering Surveys include marking engineering features in the field by a civil surveying crew. Crews may use GPS devices to mark out these features with wooden stakes.

- A pick-up truck will deliver supplies and the crew to the site, or access will be by foot.
- Where feasible, the truck will be parked outside of the species-specific default (Table 4) nest buffer.
- The work will be performed using non-power hand tools.

### Site Visits

Site visits from SCE and agency personnel may occur for various reasons.

- A pick-up truck will deliver supplies and the crew to the site, or access will be by foot.
- Where feasible, the truck will be parked outside of the species-specific default (Table 4) nest buffer.

### Site Staking/Flagging and Re-staking/Re-flagging

Site staking and re-staking consist of marking with wooden stakes the limits of an area and maintaining this staking over time. This includes staking of approved work sites, ESAs, and other areas where staking is required. In addition to stakes, this activity may consist of placing or replacing flags, signs, and rope as needed to indicate the boundary of an area that is not to be entered.

- A pick-up truck will deliver supplies and the crew to the site, or access will be by foot.
- Where feasible, the truck will be parked outside of the species-specific default (Table 4) buffer.
- The work will be performed using non-power hand tools.

### **Installation and Repair of Damaged Straw Wattles and BMP Fencing**

Following installation, straw wattles (or similar product) and BMP fencing (e.g., slit fencing) around construction sites may require repair or replacement from time to time. This activity consists of installing, realigning, replacing, or re-staking wattles or BMP fencing as necessary.

- A pick-up truck will deliver supplies and the crew to the site, or access will be by foot.
- Where feasible, the truck will be parked outside of any established buffers.
- Installation, staking, creating or repairing divots, and removal/replacement of wattles or BMP fencing will be performed using non-power hand tools.

### **Tower Nesting Deterrent/Mooring Ball (Marine Buoy) Installation in Inactive Nests**

Mooring balls will be installed in transmission towers to discourage or preclude bird nesting in potential nesting locations or in existing inactive stick nests. Mooring balls will only be installed inside the cup of an inactive nest after it is confirmed to be inactive by the Avian Biologist (See Section 3.3.1) or at locations on the tower where there are no nests but have the potential to support nests. In some cases, the inactive nests or potential nest sites may be within the default buffer distance of a different, active nest. In these cases, nesting deterrent installation will be monitored by an Avian Biologist.

- A pick-up truck will deliver supplies and the crew to the site, or access will be by foot.
- Where feasible, the truck will be parked outside of the species-specific default (Table 4) nest buffer.
- A crew member will climb the tower and install the buoy(s).
- Photographs will be taken of inactive nest status prior to and after buoy installation.

### **Tower QA/QC site finalization activities**

For purposes of this Plan, tower QA/QC consists of visually inspecting towers, installing missing tower leg steps bolts, installing missing signs on towers, and fastening brass tags to the concrete foundations. Replacement of missing or damaged steel or reinstallation of improperly installed steel shall occur only where there are no active bird nests on a tower or within default buffer distance of the tower; otherwise a nest buffer reduction notification for the specific situation will be made.

- A pick-up truck will deliver supplies and the crew to the site, or access will be by foot.
- Where feasible, the truck will be parked outside of the species-specific default (Table 4) nest buffer.
- The work will be performed using manually or battery-operated hand tools; electric or pneumatic tools requiring a generator or compressor will not be used.

### **Resistance Testing**

Following tower assembly and erection but prior to conductor installation, each tower requires resistance testing. Resistance testing involves the use of a low-voltage hand held resistance tester to measure a towers resistance given the underlying soil conditions. Two small wires are spread out by a 2-man team on foot to a distance of 150 feet and 105 feet from each tower leg (Legs A,B,C,D), staying



inside the approved work limits. Each wire is then attached to grounding probes that are inserted into the ground by hand using a hammer. Following the test, crews will remove the probe and wire and leave the site. This activity will take one hour or less per tower site. The test will determine the need for counterpoise installation, which requires the use of a skid steer with a trenching device or a mini excavator. A separate buffer reduction notification will be submitted for counterpoise installation where needed.

- Typical personnel/equipment include:
  - A 2-person crew
  - Pick-up truck for transport
  - A low-voltage hand held resistance tester to measure soil resistance. Thin probes are driven into the ground using a hammer and removed after the test is complete.
- Activity Duration: Typically 30 minutes at the base of a tower.

The activities described above are intended to capture typical, representative activities to be performed in areas near active nests. In the event a BMP repair/installation activity requiring significantly different methods (e.g., power tools) or greater work duration within an active buffer, a normal nest buffer reduction notification would be submitted.

## 2.5 Nesting Bird Deterrent Methods

This section details nesting bird deterrent methods and examples that can be used for the WOD project. SCE's nesting bird management plan includes methods that may deter nesting within and adjacent to (i.e., within 300 feet; only for mooring balls or similar rubber or plastic balls) active construction areas, including substations and yards. Implementation of deterrent methods within and adjacent (in the case of mooring balls on adjacent structures) to active construction areas may reduce the potential for an active nest to restrict WOD construction activities. Effective nesting bird deterrent methods within active construction areas will reduce the likelihood that construction will result in take of an active nest. SCE notifies CDFW, USFWS, CPUC, and BLM of all nesting bird deterrent implementation to ensure compliance with project requirements (as outlined in Table 2). Installation and maintenance of exclusionary devices by the construction team will be conducted following approval by SCE in accordance with this Plan.

SCE will implement the following types of nesting bird deterrents, as needed:

- Removal of vegetation from areas that would be directly disturbed by construction prior to the nesting season;
- Create disturbance by removing or moving equipment, vehicles, and materials on a daily basis within an active construction area;
- Use of mooring balls placed in inactive nests, directly on structures, or in other potential nest locations;
- Installation of appropriate-sized mesh netting on construction equipment and materials in staging areas, helicopter assembly and support areas, and construction yards, or other project facilities or work areas;
- Use of wire spikes placed on towers, substations, or other facilities to discourage birds from perching and nesting on these structures;

- Installation of visual deterrents such as tangle guard bird repellent ribbon in active construction areas, yards, substations, and on materials and equipment;
- Covering straw wattle and other potential nesting materials in active construction areas, yards, and substations ;
- Wrapping, stuffing, or covering ends of pipes or other materials within which birds could nest;
- Use of colored gravel, such as red or white, in active construction areas, yards, and substations; and/or
- Managing construction yard trash in a manner to reduce potential point food sources in active construction areas, yards, and substations.

Specific locations for the use of exclusionary or deterrent devices will be determined in coordination with the SCE biologist and the construction team. The construction manager is responsible to furnish labor and materials for bird exclusion or deterrent devices unless otherwise directed by SCE. Bird exclusion or deterrent devices shall be installed, maintained, and removed according to product specifications by the construction contractor as directed by an SCE biologist, and included in the weekly report.

**Nesting Habitat Reduction.** Removing potential nesting habitat within approved work areas is the first component to effectively exclude nesting birds within a construction area. To the extent feasible, prior to the onset of the nesting bird season, construction areas may be cleared of vegetation and grubbed, as appropriate to reduce potential conflicts between construction activities and nesting birds during the nesting season. Where possible, vegetation will be trimmed rather than removed or cut at ground level in lieu of grubbing. Vegetation removal will typically include removal of trees, shrubs, and herbaceous species. Prior to vegetation clearance, an Avian Biologist will conduct a preconstruction survey to confirm the absence of nesting birds, including raptors, and year-round residents, such as burrowing owl (see Chapter 3) in the area planned for vegetation removal.

**Mooring Ball (Marine Buoy).** Mooring balls, or similar sized rubber or plastic balls, have been utilized as nesting deterrents in transmission towers either inside the cup of an existing stick nest, or at locations in the tower where red-tailed hawks or ravens have a potential to nest, to preclude nest construction. An Avian Biologist will confirm that there are no active nests on a tower (See Section 3.3.1) before mooring balls are installed either in an inactive nest or on a portion of the tower without nests but have the potential to support nests. SCE will develop and implement a strategy to avoid or minimize the need for installing deterrents during the nesting season, recognizing that in some cases, the need for this activity may be unavoidable. To the extent feasible, mooring balls will be installed in known vacant nests prior to the onset of nesting bird season. However, there may be scenarios that SCE will install mooring balls during nesting seasons. For example, if an active nest becomes inactive in an area that construction would like to access, there may be a need to install a mooring ball before another nesting pair can utilize the nest. Following installation, the Avian Biologist and Biological Monitors will periodically inspect towers with buoys to confirm there are no negative affects to nesting as a result of mooring ball installation. Mooring balls will be installed in towers within the WOD corridor as a tool to preclude nesting during the construction phase of the project and removed at the conclusion of construction activity in a given area.

**Mesh Netting.** Use of mesh netting to cover equipment, stored materials and equipment, and partially constructed facilities can be a very effective means to exclude birds from suitable nesting sites within construction areas. Netting may be left in place year-around on facilities or equipment where it poses no undue hazard to wildlife. Netting will not be used outside of the nesting season in areas supporting special-status species. When not in use, netting will be stored where it is inaccessible to birds or other

wildlife. By preventing birds from accessing potential nesting sites within the construction areas, conflicts between nesting activities and construction and yard operations can be reduced. Netting of vegetation would only be used under consultation with CPUC, CDFW, and USFWS.

Netting can be specially ordered for this purpose from a number of companies including: USA Bird Control (<http://www.usabirdcontrol.com/>), Nylon Net Co. (<http://www.nylonnet.com/>), and Nixalite (<http://www.nixalite.com/birdnetting.aspx>). An example of a specification sheet for such netting (PollyNet™) is included as Appendix D.

The size of the mesh grid can vary depending on the size of birds that are being excluded. Given the diversity of birds that could nest within construction areas throughout the WOD, a 0.75-inch sized mesh may be suitable for excluding most birds, including small birds such as house finches and swallows. Selection of mesh size will be coordinated with the CDFW and USFWS.

Mesh netting, if employed, must be installed and maintained according to manufacturer specifications to be provided by SCE for agency review prior to its use of any mesh netting. To increase the effectiveness of the mesh netting as a bird exclusion device, equipment or other objects should be completely covered leaving no gaps in the netting through which birds could enter and build a nest under the netting. Mesh netting shall also be inspected daily by the Biological Monitors to detect, document, and remove any trapped wildlife, and to identify and notify the construction contractor of any rips or gaps in the netting that could permit birds to pass through and to look for wildlife that have become trapped in the netting. Lizards and snakes are especially prone to becoming entangled in excessive netting draped along the ground. Therefore, installed mesh netting should not drape on the ground. Netting shall be monitored twice daily where netting is installed on vegetation. If the Construction Contractor observes wildlife inside or trapped in the mesh netting, the Biological Monitor will be contacted immediately. Any wildlife found trapped or entangled will be documented through FRED and reported to the CPUC, BLM, CDFW, and USFWS through the FRED daily and weekly monitoring reports. SCE will document and correct any non-compliance related to mesh netting. Additional measures such as personnel training or changes to netting use will be taken if re-occurrence is a problem. If properly installed netting results in recurring entrapment, alternative methods will be implemented.

**Bird Spikes.** Use of plastic or stainless steel spikes can be effective in discouraging birds from landing on structures and to deter nest establishment. Bird spikes typically consist of groupings of stainless steel or UV-resistant polycarbonate spikes that are spaced in such a way as to prevent birds from landing and gaining a foothold on the surface to which the spikes are adhered. As birds cannot comfortably land on surfaces covered with the spikes, the likelihood that birds will attempt to build nests in these areas is low.

Bird spikes can be specially ordered for this purpose from a number of companies including: USA Bird Control (<http://www.usabirdcontrol.com/>) and Bird-B-Gone (<http://birdbgone.com/>). An example of a specification sheet for such bird spikes (Bird-B-Gone™) is included as Appendix E. Bird spikes, if employed, must be installed and maintained by the Construction Contractor according to manufacturer specifications.

Bird spikes are designed to be affixed to structures to provide longer-term deterrents to birds. Therefore, use of bird spikes may be more practical to deter nesting on structures like towers and substations. Such devices are not likely practical for use on equipment, material storage areas, or contractor yards. Installation of bird spikes on tower structures concurrent with structure construction may discourage birds from nesting on tower structures during construction. Because they are affixed to structures,

maintenance of bird spikes is low; however, these devices must be replaced periodically per the product specifications to maintain effectiveness.

**Visual Deterrents.** There are a wide range of visual deterrents that can be used to discourage birds from nesting. These range from predator decoys (e.g., plastic owls) to reflective ribbon that provides visual and auditory discomfort to birds. Reflective ribbon such as Tangle Guard Bird Repeller Ribbon (<http://www.nixalite.com/tangleguard.aspx>, Appendix F) is a Mylar reflective ribbon that can be affixed to construction equipment, around the perimeter of storage yards, or on towers or other facilities, as appropriate, to scare birds from the area, thereby reducing the likelihood of nesting. Movement from wind action produces a metallic rattling sound and its holographic surface may be construed as menacing to birds. Use of reflective ribbons can be particularly effective in material storage yards and contractor yards that may be used for a long period of time. Holographic reflective ribbons can be specially ordered from a number of companies including USA Bird Control.

**Material and Pipe Covers.** Sheltered spaces such as pipes or stacks of stored materials provide potential nesting sites for some birds. To reduce the likelihood that birds will build nests in these areas and therefore constrain the use of construction areas, substations and yards, such materials can be covered with mesh netting (discussed above) or other materials. Routinely covering equipment and stored materials will be used as a standard management practice to deter birds from nesting in these areas.

Yards often contain suitable nesting materials or opportunities for birds, especially for cavity nesting. For example, straw wattles can be attractive to birds as they provide excellent nesting material for a wide range of species. Birds attracted to this nest material may be more likely to build a nest in close proximity to these stored materials (e.g., within a yard), which can constrain work activities. To reduce the likelihood for nesting with yards where wattles are stored, such materials should be covered so birds cannot access the wattle material to use as nesting.

**Colored Gravel.** Use of colored gravel in graveled construction and facility areas can be effective in discouraging ground nesting birds. The eggs of ground nesting birds are colored in a manner to be camouflaged against naturally colored substrates such as soil or pebbles. By covering the ground surface with colored gravel that contrasts sharply with the color of the birds' eggs, ground nesting birds can be effectively discouraged from nesting in such locations. Colored gravel installation will be consistent any EIR/EIS visual resource mitigation measures and will be removed, where required, following the completion of the project.

**Trash Management.** Although not a specific deterrent, management of trash on and around construction areas is important to reduce the potential for construction activities to attract birds. Trash from food waste can provide an attractive food source for birds thereby increasing the likelihood of them nesting within construction areas. Effective management of food waste and other trash will be important to avoid attracting birds to construction areas. Such management measures will include daily removal of trash from the site as well as covering trash bins with wildlife-proof lids.

These methods, either on their own or in combination with other measures discussed above, can be effectively employed to potentially discourage birds from nesting within and immediately adjacent to construction areas. However, there is no single practical method to permanently exclude birds from construction yards, staging areas, or transmission structures. Knowledge of bird behavior and interactions and adaptive management in collaboration with the Construction Contractor is essential in understanding the implementation and effectiveness of deterrents.

## 2.6 Inactive Nest Management

This section of the Plan discusses the protocol to remove inactive nests in and within 300 feet of active construction areas, including yards, substations, and materials and equipment to minimize opportunities for nesting birds. Based on the Migratory Bird Permit Memorandum (USFWS, 2003), unoccupied nests (without birds or eggs) may be destroyed. This protocol does not cover listed species or bald or golden eagles. The purpose of inactive nest removal is to prevent or reduce the potential reuse of a currently inactive nest (e.g., return of a pair to the specific site) in a high-risk location. Nest removal as described in this Plan will only be applicable to removal for project construction and post-construction site restoration or remediation. Nest removal for non-project activities, including routine operation and maintenance, would be conducted pursuant to existing permits or agreements with the resource agencies. At the end of each yearly nesting season, SCE will inventory all nests proposed for mooring ball installation prior to the beginning of the following nesting season, and prepare an installation schedule. To the extent feasible, inactive nest removal will take place prior to the onset of nesting bird season. However, there may be scenarios where SCE will need to remove inactive nests during nesting seasons.

The following sections describe inactive nest removal for raptors, colonial bird species, and other non-listed, non-game native birds. All inactive nest removals for WOD will be documented in the FRED.

### 2.6.1 Raptors

Raptors have additional protection under the California Fish and Game Code. Since raptors exhibit nest site fidelity, inactive raptor nests may be protected even though no eggs or young are present. Inactive or partially built raptor nests will be mapped and documented by the Biological Monitor/Avian Biologist. Inactive raptor nests that will be impacted by WOD construction activities will be removed according to the following protocol. Removal of raptor nests is not proposed under any other circumstances.

- An email notification will be sent out to CDFW and CPUC providing details of the nest location, reason for nest removal, nest ID number, and nest removal schedule 24 hours prior to nest removal.
- An Avian Biologist or Biological Monitor under the direction of an Avian Biologist will observe the nest for four hours (breeding season) or one-hour (non-breeding season), during favorable field conditions (good visibility, low wind) to determine whether there is any activity at the nest site;
- If an Avian Biologist determines that the nest is unlikely to be active based on these observations (e.g. absence from the nest site and no “nest decorating” observed), the construction team will provide personnel to inspect the nest if it is not accessible by a Biological Monitor or Avian Biologist due to safety concerns;
- For inaccessible nests (e.g., on transmission towers and poles), the construction team will take a photo of the nest contents and provide the photograph to a Biological Monitor/Avian Biologist;
- Once a Biological Monitor or Avian Biologist has confirmed from the photo that the nest is inactive, the construction contractor will remove the nest immediately following confirmation that it is inactive.

The agencies will receive notification of the nest removal through FRED and the weekly report. Nests will not be collected or taken off site.

If necessary and feasible, nest platforms may be constructed according to SCE-provided guidelines (see Appendix G).

Removal of all inactive raptor nests will be documented on a daily basis through a FRED daily monitoring report and summarized in weekly FRED monitoring reports that are sent via email to CPUC, BLM, USFWS and CDFW.

### **Burrowing Owl**

Burrowing owls nest in burrows in the ground and are mostly non-migratory, meaning that burrows may be utilized (i.e., occupied) year-round as escape burrows. Additionally, because they nest in burrows in the ground, further surveys may be required (per the Staff Report on Burrowing Owl Mitigation; CDFW, 2012) to determine whether or not their nest burrows are active or their escape burrows are being used

As described in the Final EIR/EIS, preconstruction surveys will determine the presence/absence of suitable habitat (i.e., burrows) for burrowing owl occupation and/or nesting. Management of active burrowing owl nests are addressed in the species specific Burrowing Owl Management Plan (Appendix H).

## **2.6.2 Colonial Birds**

Based on the Migratory Bird Permit Memorandum (USFWS, 2003), colonial nesting birds (which include swifts and swallows) are highly vulnerable to disturbance. These birds may re-use nests in successive years. Destruction of unoccupied nests during or near the nesting season could result in take. Outside the species specific nesting season, CDFW staff and USFWS staff will be consulted regarding removal of colonial bird species' inactive and partially built nests. Inactive nests of colonial bird species will be removed or collapsed only after review by CDFW and USFWS staff. Currently, there are no known colonial nest within or near the ROW.

Colonial bird nests that would be impacted directly by WOD construction activities will be removed according to the following protocol:

1. A Biological Monitor/Avian Biologist will determine whether the nests are active through observation of bird sign and behavior, as described in Section 3.2. The Construction Contractor will provide personnel to inspect the nests and take a photograph of the contents if they are not accessible by the Biological Monitor/Avian Biologist.
2. If the Biological Monitor/Avian Biologist determines the nests are not active, CDFW and USFWS will be consulted regarding removal of colonial bird species nests. Nests will be removed or collapsed immediately after they are confirmed to be inactive and only upon approval from CDFW and USFWS. CPUC and BLM will be copied on any correspondence when CDFW and USFWS are consulted.

Nest removals will be documented in the FRED and summarized in the weekly reports. Nests will not be collected or taken off site by biologists.

## **2.6.3 Non-listed Special-Status, Non-Special-Status, Non-Game Bird Species Nest Removal**

Removal/deterrence of non-special-status, non-game bird inactive nests, for species other than raptors, burrowing owl and colonial bird species will be completed as discussed below. For these species, nests being constructed, but not containing eggs or chicks, are considered inactive (see Section 2.2). For non-listed special-status species, nests are considered active during nest building; therefore, removal of non-listed special-status nests will only occur once the nest is confirmed inactive by this definition.



Inactive nests found within construction areas, including substations, yards, materials, and equipment, may either be removed and dropped to the ground, or have an in-nest deterrent (i.e., mooring ball, see Section 2.5) Mesh netting will not be installed in nests. The Construction Contractor will provide personnel to inspect the nest and take a photograph of the contents if it is not accessible by a Biological Monitor/Avian Biologist. Nests will not be collected or taken off site.

When construction takes place during the nesting season, inactive nests will be identified during preconstruction surveys and during construction monitoring, if not previously identified during earlier project or non-project SCE surveys or monitoring.

Non-listed special-status, non-special-status, non-game bird nests that would be impacted directly by WOD construction activities will be removed according to the following protocol:

1. To determine whether a nest is inactive, a minimum of one uninterrupted, consecutive hour of monitoring in suitable conditions for detecting nesting activity is required prior to removal, as described in Section 3.2.
2. The construction contractor will provide personnel to inspect the nest and take a photograph of the contents if it is not accessible by a Biological Monitor/Avian Biologist.
3. After the Biological Monitor/Avian Biologist confirms that the nest is inactive and that it does not belong to a listed species, the nest will be removed and left on site.

No nests will be taken off site or collected. The nest location will be subsequently monitored to detect any re-nesting attempts. Initial re-nesting attempts on project elements or equipment will be deterred until the bird selects an alternative nest site.

## 3. Field Approach

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Nesting bird surveys will be carried out in several stages during the nesting season (typically January 1 through August 31, but will be based on seasonal variation). An Avian Biologist will conduct a preconstruction nest survey within ten days prior to the start of work at any given site. Preconstruction survey results are submitted to CPUC to obtain approval prior to beginning work at the site. The CPUC designated avian consultant will review the preconstruction nest surveys reports within two business days of submittal or may request additional information, as necessary. On the first day of construction at any given site, a qualified Avian Biologist will perform a pre-construction “sweep” to identify any bird nests or other resources that may have appeared since the 10-day survey. On each subsequent day of construction during the nesting season, the Biological Monitor will first perform daily sweeps at each work site to look for resources, including nesting birds. The daily sweeps will be conducted to identify new nests (partially built, active, or inactive) not detected during the preconstruction survey or clearance sweep and to also document the status (active or inactive) of known nests in a construction area. The preconstruction nest survey, and daily sweeps will be conducted within suitable habitat for nesting birds within the construction areas and include a 300-foot survey area for non-raptors and 500-foot survey area for raptors, collectively referred to as the Biological Survey Area (BSA). Prior to scheduling a survey or determining a change in status of a nest, adverse weather conditions and time of day (surveys typically should be conducted in the early morning) will be considered because these conditions reduce the likelihood of detecting nesting birds and associated nesting behavior. Care will be taken to avoid potential take of a nest due to surveying and monitoring efforts. The status of all active nests within the BSA will be documented and summarized in weekly reports and the weekly nesting bird table. This information will be provided weekly to the CPUC, CDFW, the USFWS, and the BLM via e email summary reports (see Section 3.4, Reporting).

### 3.1 Survey Requirements

#### 3.1.1 Survey Experience and Training

Avian Biologists and Biological Monitors, hereafter collectively referred to as surveyors, will meet the qualifications described below. As different species have different nesting niches and different breeding strategies, surveyors must be able to readily distinguish species that may breed locally from those that do not; they must have knowledge of habitat contexts and types of behaviors to look for when evaluating nesting potential. Appendix A contains a list of the potential nesting bird species and relevant information on their nesting behaviors. This list draws on information presented in Baicich and Harrison (1997), Kiff and Irwin (1987), and the online *Birds of North America* (<http://bna.birds.cornell.edu/BNA>), as well as SCE’s Biological Consultants’ extensive experience surveying for and studying nesting birds in southern California. All surveyors will receive training on the information and procedures detailed within this Plan.

#### 3.1.2 Qualifications

##### 3.1.2.1 Lead Avian Biologist

To be approved as a Lead Avian Biologist, an individual is expected to have the following average qualifications:

- Two or more years of focused experience with a range of bird species in Southern California performing nesting bird surveys or monitoring nests
- Worked on 10 or more substantial multi-season bird projects, or the equivalent, performing surveys, habitat assessments, etc. in the field. Of these, at least 8 must be in the Southwest, preferably in California

### **3.1.2.2 Avian Biologist**

To be approved as an Avian Biologist, an individual is expected to have the following qualifications:

- Worked on 3 or more substantial multi-season bird projects or the equivalent, performing surveys, habitat assessments, etc. in the field. Of these, at least 2 must be in the Southwest, preferably in California

### **3.1.2.3 Biological Monitor**

To be approved as a biological monitor, the recommended qualifications are listed below:

- Worked on construction monitoring of biological resources on 2 or more projects (6 months or more total)

## **3.2 Field Maps**

All surveyors will be provided with maps that depict the project disturbance limits, ROW, access roads and other project features and current nest and buffer data. Surveyors will have access to the FRED database to view all previously collected data. The database and associated mapping interface will be regularly updated so real-time nest and other biological resource data will be available to the surveyors.

## **3.3 Nesting Season Survey Methodology**

A survey will consist of a pedestrian search by an Avian Biologist for both direct and indirect evidence of bird nesting. Direct evidence will include the visual search of an actual nest location. Indirect evidence will include observing birds for nesting behavior, such as copulation, carrying food or nesting materials, nest building, adult agitation or feigning injury, feeding chicks, removal of fecal sacks, and other characteristic behaviors that indicate the presence of an active nest. Surveys will be conducted in accordance with the guidance in Martin and Guepel (1993).

The size of the survey area physically surveyed will vary according to site specific conditions. The amount of acreage covered by surveyors will be determined based upon the nesting bird activity encountered and the opinion of the qualified personnel conducting the surveys. The density and complexity of habitat type will be taken into account during survey planning to determine the field methods, number of qualified personnel, and the time needed to locate nests. Surveys located in riparian woodland and coast live oak woodland habitats, found on the WOD project, may require observations from multiple vantage points due to the density and height of vegetation, as well as, additional search effort in trees and bushes in order to locate all potential nests prior to construction. Surveys located in chaparral and coastal sage scrub habitats, found on the WOD project, will require observations from less vantage points than woodlands but due to the considerably denser vegetation may require extensive searching and longer behavior observations in order to detect all potential nests prior to construction. Surveys located in alluvial scrub and desert scrub habitats, found on the WOD project, may be completed in less time, relative to woodland, chaparral, or sage scrub due to lower vegetation density that would allow

surveyors to spot nests and nesting activity. Surveys located in grassland and agriculture lands on WOD would be expected to take less time and more area would be covered over a given period, relative to denser vegetation types due to the increased visibility and uniformity found in these vegetation communities.

Additional time or surveys will be conducted if the surveyor does not feel that the area has been adequately covered. A variety of survey approaches may be needed to locate nests depending on the species likely to be encountered at each BSA. Under some circumstances, the surveyor may be able to survey a substantial portion of the BSA from one (or more) inconspicuous location(s) to detect birds entering and leaving the BSA. Sitting quietly in inconspicuous locations when other types of disturbance are absent allows observers to intensively listen and observe bird behaviors for discernible direct and indirect evidence of nesting. When moving through vegetation, surveyors will watch for distraction displays, aggressive responses and interactions, and birds flushing suddenly from atypically close range (often an indicator of a nest site). If defensive or distraction displays from birds are observed, an active nest is likely to be nearby. Surveyors will utilize visual observations of nests and bird behavior as a method for detecting potential nests.

Nests that pose constraints to the WOD activities will be directly observed or inferred by behaviors such as feeding chicks or removing fecal sacs. If the presence of a potentially active nest is suspected but cannot be confirmed, additional surveys will be conducted. If construction is planned to occur in the area and additional surveys have not determined the precise location of a nest, a disturbance free buffer may be implemented that would protect the relative location until the biologist has located the precise location of a nest. The Avian Biologist will notify the SCE biologist of all active and potentially active nests detected during the preconstruction surveys and sweeps as well as report them in the FRED and include in weekly reports to the agencies. Preconstruction and daily clearance sweeps during nesting bird season will follow the same methodology discussed in this section to ensure that all active nests are located prior to construction occurring in the vicinity. Prior to vegetation removal activities within the nesting bird season, a sweep will be conducted by an Avian Biologist preceding the scheduled construction activity to help document and protect nests have been built since the preconstruction survey.

Once a nest is found, it will be observed for activity, if no activity is observed within a minimum one hour monitoring period (four hours for raptor nests), the nest would be approached to check the status. The Avian Biologists will use best professional judgement regarding the monitoring period and whether approaching the nest is appropriate. If no adult or juvenile bird activity is observed within one hour (four hours for raptor nests), the nest can be considered inactive. If an inactive nest will be directly impacted by WOD activities due to the location of the nest in a tower, or vegetation in an approved project work area, then the removal procedures outlined in Section 2.6.1 of this plan will be implemented. If an Avian Biologist/Biological Monitor determines that an hour (or four hours for raptors) is not sufficient to make a determination on the nest status, then one hour increments will be employed until a final determination regarding nesting status can be made. Every effort will be made as to not expose the nest to potential predation as a result of survey and/or monitoring activities. All nest visits will be conducted by a single surveyor and will last only as long as necessary to check the nesting stage or until circumstances necessitate departure (e.g., potential nest predator detected or sustained indications of stress by any protected bird).

When approaching a nest, surveyors will first determine whether there are any potential nest predators nearby (e.g., western scrub-jays [*Aphelocoma californica*], common raven [*Corvus corax*], cactus wren [*Campylorhynchus brunneicapillus*], and house wren [*Troglodytes aedon*]). If no predators are observed, the surveyor will approach the nest. Surveyors will be carefully aware of the possibility of additional,

undetected nests nearby. They will avoid creating a scent or visual path that directs animals to the nest (e.g., leaving no trampled spot by the nest and continuing past the nest upon leaving it rather exiting on the entrance path). Surveyors will also briefly look in at least two empty potential host plants for bird nests before and after looking in the nest in an attempt to deter predators.

### **3.3.1 Active Nest Determination**

When an active nest (defined in section 2.2) is confirmed, the default species-specific buffer will be implemented per this Plan (Table 4) and work within the new nest buffer will cease immediately. If a bird is seen carrying food or feeding nestlings, but the vegetation is too dense for the surveyor to visually locate the nest, the approximate nest location will be inferred by the surveyor based on observed bird behaviors. Surveyors are not to risk the failure of a nest in an effort to discern an exact location or exact status (e.g., number of eggs, size of nestlings, etc.). If a buffer reduction is requested by the contractor, the surveyor will then continue to observe the nest and parental behavior to determine whether a reduced buffer can be appropriately implemented. Active nests will be monitored before implementing a reduced buffer. Prior to implementation, all buffer reductions will follow the process outlined in Section 2.3.3.

A nest completion date can be estimated by combining the stage of nesting at discovery and the known typical nesting duration for the species. However, because the date will be estimated, it is important to note that a nest may be active for a shorter or longer period of time than that estimated. For altricial species, a time buffer from three days up to three weeks will be added to every nest to allow for post-fledging nest dependence.

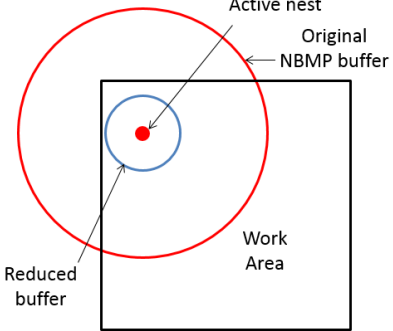
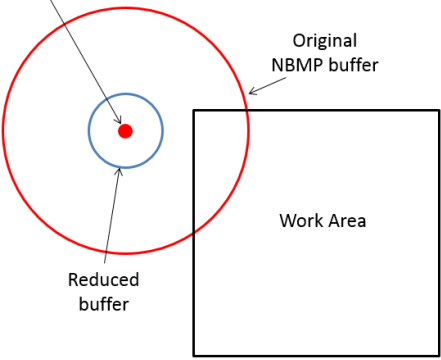
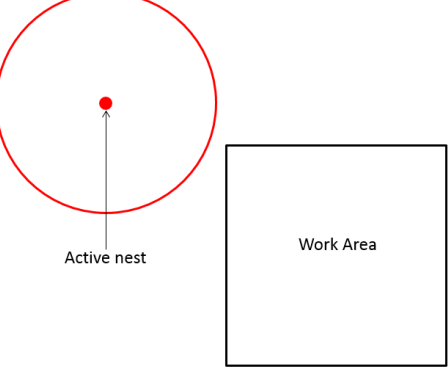
## **3.4 Monitoring**

As a part of construction monitoring, Avian Biologists and Biological Monitors will check the status of any active nests within the BSA and update the nest monitoring database (Nest Event). This will ensure that nests around active construction areas are being given proper attention. The Biological Monitors will be responsible for monitoring the contractor's adherence to the established nest buffers, the contractor's adherence to the conditions of buffer reduction approvals, and monitoring the nesting birds' behavioral reaction to construction throughout the day during active construction.

Both nests with default buffers and nests with reduced buffers will initially require frequent monitoring to establish if the buffer is sufficient to prevent impacts to the nests. Thereafter, for most species, active nests will be monitored on intervals no longer than every four days (weekly for birds with longer nesting periods, over two months, such as ravens, great horned owls and red-tailed hawks). Under the default buffers, active nests do not require further monitoring once work is completed in the area. For nests with reduced buffers, the same monitoring protocol will be followed until the nest is determined to be fledged or inactive. New nests discovered after work completion in an area would not require monitoring. Table 5 illustrates the monitoring frequency that SCE will utilize when an active nest is located.

Avian Biologists will be responsible for documenting new nests, providing status updates of previously identified active nests, and monitoring implemented buffers within and adjacent to construction areas. They will utilize construction maps, flagging, staking, and signage, and in-field communication to monitor for compliance with plan requirements. Avian Biologists and Biological Monitors will utilize monitoring methods as described in Sections 2 and 3 to minimize disturbance to active nests while conducting updates and documenting behavioral reaction to construction. Nests updates may be modified to accommodate adverse weather conditions where flushing an adult off of the nest could threaten the nest outcome or to accommodate nests noted as being sensitive to human presence.

**Table 5. Active Nest Monitoring Schedule**

Work Location	Nest Location	Frequency	
<b>Between original buffer and reduced buffer</b>	Inside work area		Max interval every 4 days (weekly for some large-bodied species) until nest fledges or declared inactive
	Not inside work area		Max interval every 4 days (weekly for some large-bodied species) until nest fledges or declared inactive
<b>Not in nest buffer</b>	N/A		Max interval every 4 days (weekly for some species) until completion of work

For some hazardous construction activities (i.e. wire stringing) it is unsafe for the biological monitor to be too close to construction. In these scenarios, the biological monitors will observe the activity from outside of the right-of-way at a safe distance. Where feasible and safe around these activities, the monitor will still perform a clearance sweep at the beginning and end of the day to confirm the status of the active nests present in the BSA around the site. All nest visits will be documented in the FRED (for biological resources), and reported to agencies, as requested.

In the case of precocial species such as killdeer, Biological Monitors will track broods after hatching to ensure chicks are not harmed by construction activities until chicks are capable of flying or are no longer



found within active construction areas. Avian biologists may recommend chick fencing or other measures to prevent chicks from entering roads or work areas, as needed [cross-reference to Section 2.3].

## 3.5 Reporting

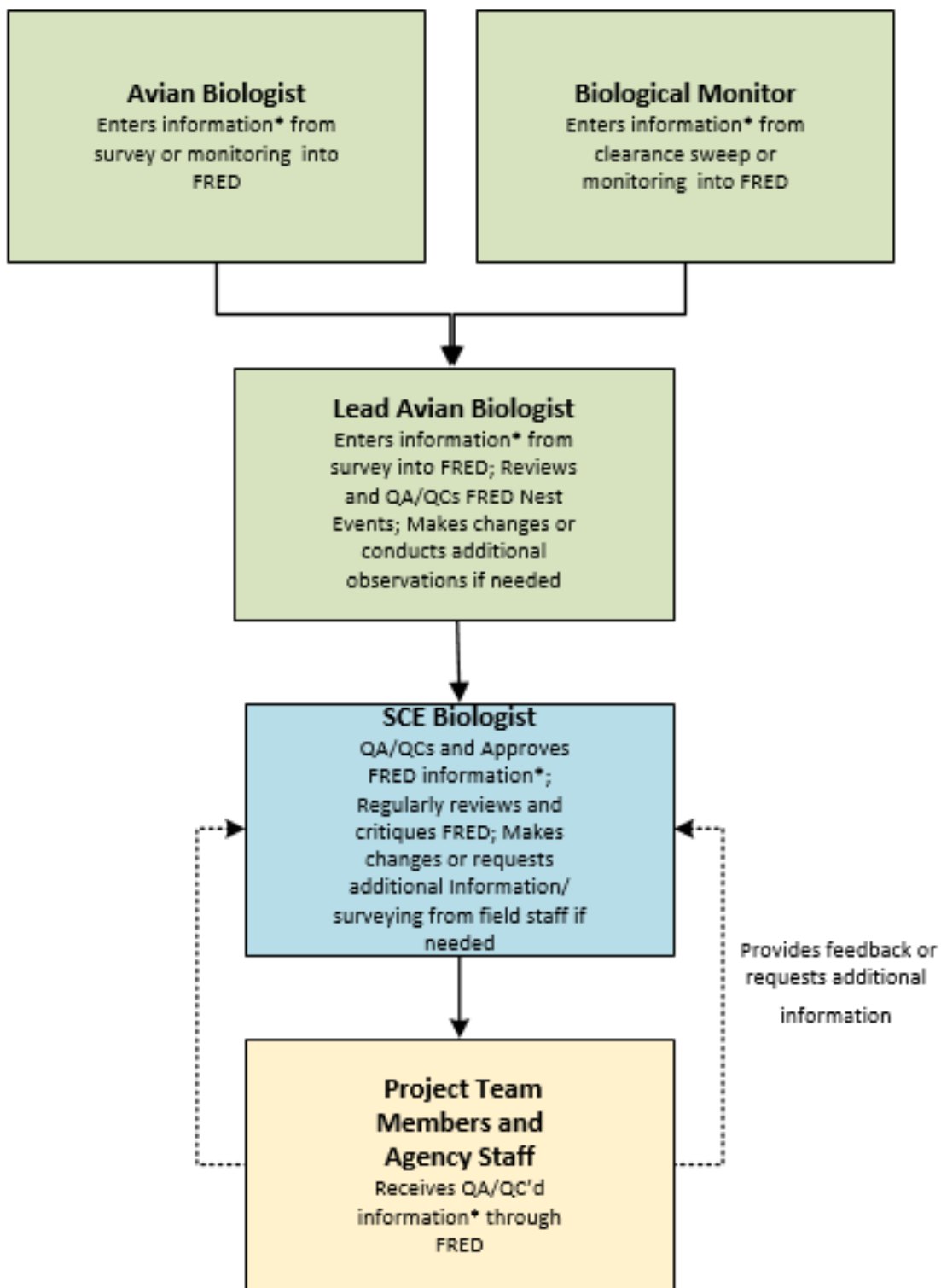
Pre-construction nest survey reports will be submitted to the CPUC and BLM electronically via the FRED and will include the time, date, and duration of the survey; identity of the surveyor(s), a list of species observed, and electronic data and maps identifying nest locations and the boundaries of established buffer zones. The electronic data set will be updated following each pre-construction survey and will be accessible to CPUC and BLM on the FRED Database. Regular calls will take place between SCE and the agencies to discuss the weekly reports.

The CPUC will receive the project plan of the day listing scheduled project activities for that day. Daily and weekly biological monitoring reports will be generated for WOD and provided to agencies. All data collected for the daily reporting will be input from the field on hard copy paper forms or mobile smartphones using an offline form, and then entered/uploaded online into the FRED. New nest events will be entered into the FRED and agency biologists will be notified by automated email within 24 hours. A nesting bird table, updated weekly for submittal to the CPUC and CDFW, will show the current status of all active nests within the BSAs, distances of disturbance-free buffers that have been implemented to avoid nest failures, proximity to active construction activities, construction activities occurring, and estimated fledge date. Further detail on data collection and processing is provided in 3.4.1 Data Sheets.

An annual report shall be submitted to the CPUC, CDFW, USFWS, and BLM by November 31st for each year WOD is under active construction or post-construction remediation or restoration providing a summary of the results of nest monitoring activities throughout the year, including reported nest success and failures. SCE will provide USFWS a summary spreadsheet of all nests tracked as a part of WOD for the previous nesting season. An annual meeting to review the annual report and “lessons learned” will occur prior to the start of the subsequent nesting season. The annual report will include sufficient substance and detail to provide the basis for the adaptive management and evaluation of lessons learned. Specific contents and format of the annual report will be reviewed and approved by the lead agencies in consultation with the resources agencies.

### 3.5.1 Data Sheets

All nesting bird data will be entered into the FRED Bird Nest Events (online forms). This will provide the SCE biologist, Avian Biologist, and Biological Monitor current information pertaining to a specific nest, as well as the ability to print maps with the nest data (nest location and buffers). The data fields that have been established in the FRED are defined in Table 6. The FRED fields represent the most current fields and may be subject to updates as improvements to the FRED Database are made. Figure 6 illustrates the FRED Avian Monitoring QA/QC Process.



\*Information refers to FRED Nest Events, FRED Daily/Weekly summaries, FRED Reports, FRED Monitoring Logs, etc.

Figure 6. FRED Avian Monitoring QA/QC Process

**Table 6. Field Definitions for Online Entry into the FRED**

Field	Explanation
Date	Use calendar icon to choose date.
Time	Time (defaults to time of data entry).
Nest number	A unique identifier entered by the surveyor. The name will consist of the surveyor's initials and a number. For example – KF1.
Lead Monitor / SME	Segment Lead's name
Surveyor	Your name.
Segment	Pull-down menu for the segment numbers.
GPS coordinates UTM (meters)	Collected in latitude and longitude. Make sure that measuring device (Garmin etc...) is set to proper units. Zone: ___ ; N or S ; _____mE and _____ mN <ul style="list-style-type: none"> <li>▪ Ground Buffer Radius in feet. "O" for no buffer drawn</li> <li>▪ Helicopter Buffer Radius: in feet.</li> </ul>
Buffer Implemented	Yes or No
Device type	Pull-down menu choices are: "Garmin/Other-Recreational Grade (+/-40')", Smart Phone w/GPS-Advanced Recreation Grade (=-/10-15')", Trimble (Yuma)/Other-Professional Resource Grade (+/-1-3metter)", Trimble (GOXH)/Engineering Survey Grade (Sub Meter accuracy)", "Launched From Map", and "Device Unavailable"
Species	Pull-down menu based on the four-letter codes defined in Appendix A.
Offset	Check box for noting if the nest is offset from the GPS coordinates.
Direction	Pull-down menu of eight directions.
Distance in meters	How far the nest is from the GPS coordinates (in feet). In meters or feet?
Nest location description	Where is the nest (specific description)? Be specific.... anything that can help another person finds the nest; i.e., nest within top half of the oak tree or nest is located within a rocky outcrop. Use descriptive words. TAKE A PICTURE of the nest, at least one overview, and one close-up.
Nest status	Active, Inactive, Inactive Vacant Raptor, Removed, Deterrent Installed. Active is a nest with eggs, nestlings, or recent fledglings. Inactive is a nest that no bird is currently using.
Number of eggs	If able to observe eggs, number of eggs observed.
Number of chicks	If applicable, number of chicks observed in nest.
Estimated fledge date	General estimate of how long before young fledge. Use Appendix A for reference.
Nest activity	Information on activity/behaviors observed. "Feeding Chicks", "Fledglings close to nest" (i.e. branching), "Incubation", "Nest Building", "No Activity Observed", "Failed/Non-Project related, Failed/Project-related, Fledged, or Unknown Outcome.
Height from ground in feet	How high the nest is from the ground measured in feet.
Distance from work area in feet	Approximate distance from nest to the active work area in feet.
Distance from access road in feet.	Approximate distance from the nest to the access road in feet.
Substrate/species	What is the nest in (e.g. plant species, structure, bridge, and ground)? TAKE PICTURES from at least three directions.

**Table 6. Field Definitions for Online Entry into the FRED**

<b>Field</b>	<b>Explanation</b>
Nest name	A unique identifier entered by the surveyor. The name will consist of the surveyor's initials and a number. For example – KF1.
Location description/habitat	General area of the nest in relation to the surrounding vegetation/unique features. Be specific... anything that can help another person find the nest. i.e.: nest is located x-feet north/northwest of access road. Or, nearest street address, cross streets etc. TAKE A PICTURE.
Is there an offset?	Are the measurements skewed from the actual location of the nest?
Offset directions	Pull-down menu options are: "N," "NE," "NW," "S," "SE," "SW," "E," OR "W."
Offset distance in feet	0.000
Descriptions of existing work activities.	Describe work activities currently occurring at nest site and adjacent to the nest site. Be sure to cover all directions (i.e. N/S/E/W). Note which activity is highest disturbance.
Environmentally Sensitive Area established?	Yes or No
ESA type	Two options: ground or helicopter
Work area affected?	Yes or No.
Name of road affected?	Access Road or Named Road.
SCE Notes	Record of agency engagement for the nest event.
Agency-reduced buffer in feet	Current Ground/Helicopter Buffer Radius
Tower or Work Area ID	Tower X or Construct X

## 4. Plan Approval and Amendment

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This Plan will be implemented following approval or concurrence by the CPUC, the BLM, the CDFW and the USFWS. Any proposed revision or amendment must be reviewed by BLM and CPUC to confirm consistency with mitigation measures adopted by the lead agencies in the BLM Record of Decision and CPUC Decision, and by CDFW and USFWS to confirm consistency with the respective state and federal wildlife statutes.

Minor amendments or clarifications to the Plan will be implemented following receipt of email concurrence from CDFW, USFWS, CPUC and BLM staff. Minor amendments or clarifications may include, but are not necessarily limited to, additional blanket or programmatic buffer reductions/exemptions, additional construction activities and disturbance levels not already included in Table 1. Major amendments to this plan that may result from changes in applicable regulations, which alter the procedures outlined in this plan, will be submitted to the CPUC, BLM, CDFW and USFWS for concurrence prior to implementation. Following concurrence of minor or major amendments, a revised version of the plan with date of revision will be provided to CDFW, USFWS, CPUC, and BLM.

## 5. References<sup>6</sup>

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CDFW (California Department of Fish and Wildlife). 2015. Special Animals List. January 2015. <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPAnimals.pdf>. Accessed May 2015.

\_\_\_\_\_. CDFW. 2012. Staff Report on Burrowing Owl Mitigation. Natural Resources Agency, Department of Fish and Game. March 7.

USFWS (U.S. Fish and Wildlife Service). 2003. Migratory Bird Permit Memorandum, Subject: Nest Destruction. Issued: April 15, 2003. <http://www.fws.gov/policy/m0208.pdf>. Accessed October 16, 2014.

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<sup>6</sup> All references used in preparation of this Plan should be referenced in this section and called out in the body of the Plan.



## 6. Revisions

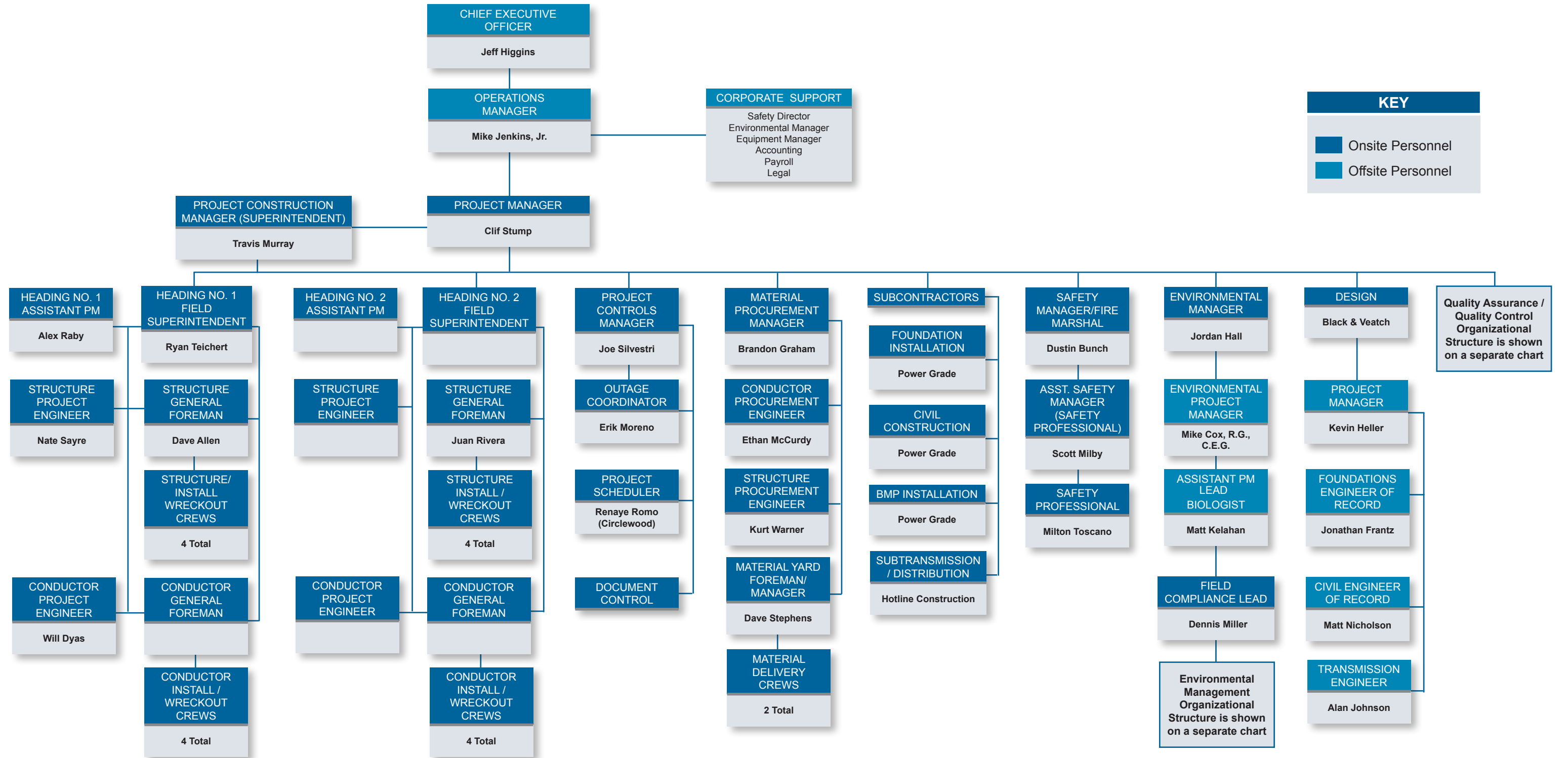
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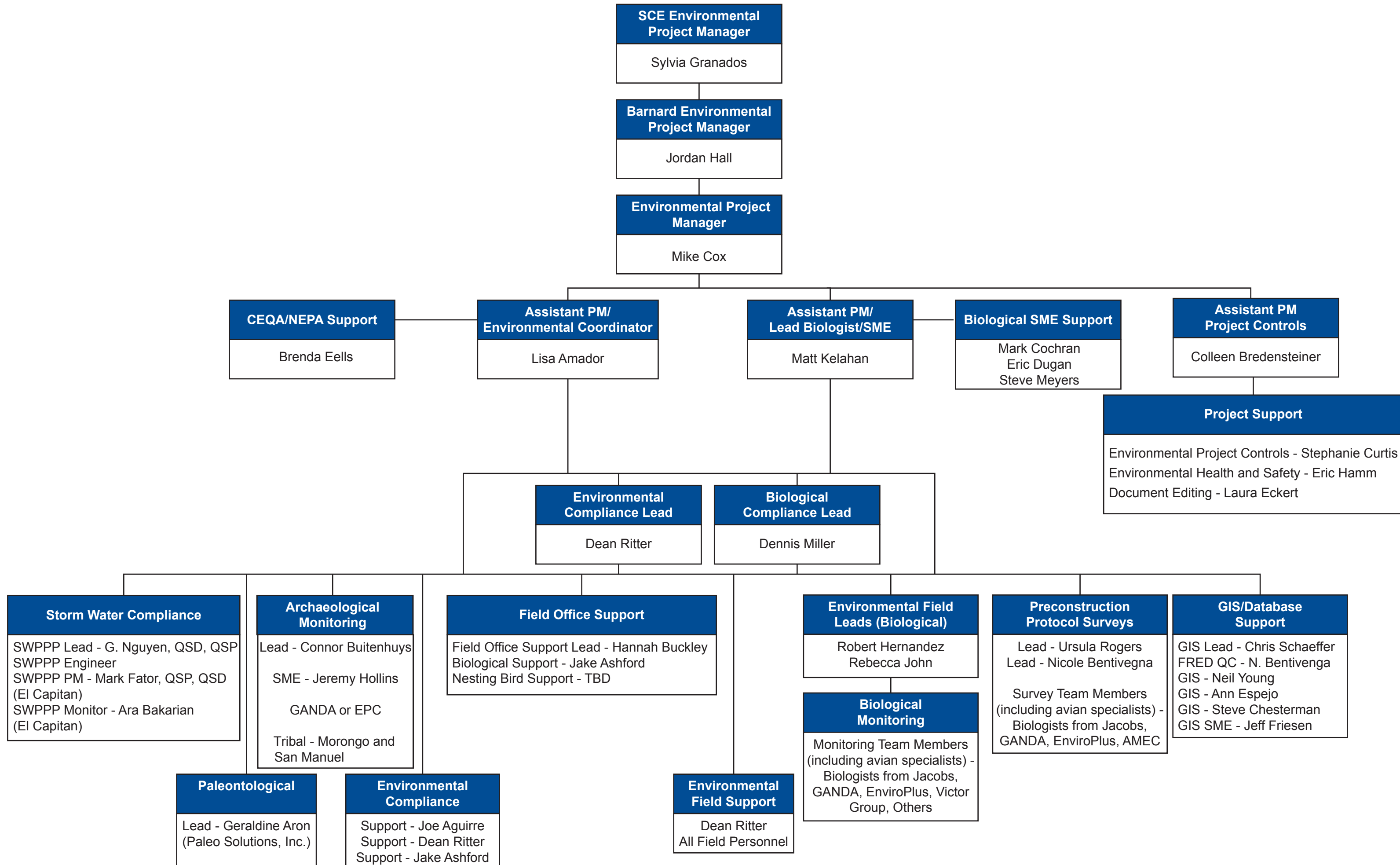
Date	Description of Revision	Contact

## **ATTACHMENT G**

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Organization Charts and Project Contacts List (Confidential)





**Notes:**  
 SME - Subject Matter Expert  
 TBD - To Be Determined

## **ATTACHMENT H**

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### Example Weekly Compliance Report



5020 Chesebro Road, Suite 200, Agoura Hills, CA 91301-2285  
Tel. 818-597-3407, Fax 818-597-8001, www.aspeneg.com

**PROJECT MEMORANDUM**  
**SCE WEST OF DEVERS UPGRADE PROJECT**

**To:** Billie Blanchard, Project Manager, CPUC  
**From:** Vida Strong, Aspen Project Manager  
**Date:** October 11, 2017  
**Subject:** Monitoring Report #1: October 1 to October 7, 2017

**Introduction**

This report provides a summary of the construction and compliance activities associated with Southern California Edison’s (SCE) West of Devers Upgrade Project.

A summary of the Notices to Proceed (NTPs) for construction is provided below.

**CPUC Environmental Monitor (EM):** Jenny Slaughter was onsite October 6, 2017.

**Work Schedule:** Construction at the San Bernardino Substation Site is being conducted Monday-Friday between 7:00 am and 3:00 pm, with some exceptions to accommodate necessary electrical outages.

**CPUC NTPs**

Table 1 summarizes the NTPs for the West of Devers Upgrade Project.

**Table 1 - NTPs**  
(Updated 10/11/17)

NTP #	Date Requested	Date Issued	Phase	Description
NTP #1	04/04/17	06/29/17	Material Yards	Construction or use of 10 Material Yards
NTP #2	05/18/17	06/29/17	Substation Upgrades	Upgrades to 5 existing Substations
NTP #3	06/05/17	08/10/17	Distribution, Subtransmission, and Telecom	Construction of the Distribution, Subtransmission, and Telecommunication portions of the Project
NTP #4	07/13/17	09/05/17	Transmission	Transmission Line Construction on private lands
NTP #5	08/07/17	UNDER REVIEW	Construction on BLM lands	Transmission Line construction on BLM lands

**Construction & Compliance**

A summary of construction and compliance activities is provided below by NTP.

**Material Yards (NTP #1)**

**Summary of Construction Activity**

1. Intermittent deliveries of Project materials are occurring at the Devers Yard. No Yard improvements required.



## **Environmental Compliance**

1. No non-compliance incidents were reported by SCE during the subject period.

### ***Substations, San Bernardino Substation Upgrades (NTP #2)***

#### **Summary of Construction Activity**

1. Construction activities are being performed by Professional Electrical Construction Services. Construction activities started on October 2, 2017. All work authorized under NTP #2 is taking place within the walls or fences of the existing substations. No changes to access, parking, drainage, or perimeter fencing will take place.
2. Professional crews mobilized material and equipment to the San Bernardino Substation during the subject week.
3. Crews completed the wreck-out of two switchracks and circuit breakers during the subject week (see Figure 1).
4. New foundations were poured for the new switchrack positions.
5. Soil from excavations was stored onsite, then was hauled off site (see Figure 2)

## **Environmental Compliance**

1. Drip pans were placed under equipment stored overnight consistent with Mitigation Measure (MM) H-1a (see Figure 3). Equipment was inspected for leaks and drips. No leaks were identified.
2. Foundation holes were covered at the end of the shift, consistent with MM WIL-1b (see Figure 4).
3. The CPUC EM verified that equipment used by the contractor was in compliance with requirements of MM AQ-1b (see Figure 5).
4. Crews used water from a hose on site to control fugitive dust during construction activities.
5. No non-compliance incidents were reported by SCE during the subject period.
6. No non-compliance incidents were observed by the CPUC EM during the subject period

### ***Distribution, Subtransmission, and Telecommunication Work (NTP #3)***

No work authorized by NTP #3 has occurred.

### ***Transmission Work (NTP #4)***

No work authorized by NTP #4 has occurred.

### ***Transmission Work BLM Lands (NTP #5)***

NTP #5 is under review.

## PROJECT PHOTOGRAPHS



Figure 1 – Construction crews removed existing foundations and drilled holes for new foundations for the replacement switch racks.



Figure 2 – Soil from foundation excavations is temporarily stored on site until haul

trucks remove it off site.



Figure 3 – Drip pans are placed under stationary equipment and under heavy equipment at the end of the day.



Figure 4 – Foundation holes left overnight are covered to prevent wildlife entrapment.





Figure 5 – Equipment verified to be compliant with MM AQ-1b requirements are issued stickers for identification.

## **ATTACHMENT I**

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### Minor Project Refinement Form

# Environmental Minor Project Refinement Form



Project Name: \_\_\_\_\_ Request Prepared By: \_\_\_\_\_

Date Approval Required: \_\_\_\_\_ Variance Request No.: \_\_\_\_\_

Date Submitted: \_\_\_\_\_ Location: \_\_\_\_\_

Landowner: \_\_\_\_\_ Landowner Parcel Number: \_\_\_\_\_

Current Vegetative Cover/Land Use: \_\_\_\_\_

Existing Sensitive Resource?  NO  YES Specify: \_\_\_\_\_

Modifying (check as many as apply):  
 MITIGATION MEASURE  PLAN/PROCEDURE  SPECIFICATION  
 DRAWING  PERMIT CONDITION  OTHER

Specify Source (e.g., Mitigation Measure B.5): \_\_\_\_\_

---

## Description of Change and Justification (Attach additional sheets if needed.)

Attachments:

PHOTO CONSTRUCTION DRAWING  ADDITIONAL ENVIRONMENTAL ANALYSIS  CORRESPONDENCE  OTHER: \_\_\_\_\_

---

## Resources:

Biological  NO SENSITIVE RESOURCES PRESENT  SENSITIVE RESOURCES PRESENT  N/A

New Survey Report Attached:  YES  NO

If No, Previous Biological Survey Reference: \_\_\_\_\_

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Cultural  NO RESOURCES PRESENT  RESOURCES PRESENT WITH PROJECT APE:  YES  NO  
 (PAVED/GRAVEL AREA AND NO GROUND DISTURBANCE)

If in APE, Previous Cultural Survey Reference: \_\_\_\_\_

If not in APE, attach new survey report.



**Other Potential Impacts:** (Check any potential changes to permitted impacts and provide details below. Attach additional sheets if needed.)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> AIR QUALITY          | <input type="checkbox"/> LAND USE            | <input type="checkbox"/> TRAFFIC         |
| <input type="checkbox"/> BIOLOGICAL RESOURCES | <input type="checkbox"/> NOISE               | <input type="checkbox"/> VISUAL          |
| <input type="checkbox"/> CONTAMINATED SOILS   | <input type="checkbox"/> PALEO RESOURCES     | <input type="checkbox"/> WATER RESOURCES |
| <input type="checkbox"/> CULTURAL RESOURCES   | <input type="checkbox"/> SOCIOECONOMIC       | <input type="checkbox"/> WETLANDS        |
| <input type="checkbox"/> HAZARDOUS MATERIALS  | <input type="checkbox"/> STORM WATER (SWPPP) |  |

**CEQA and Permitting:** (Provide details for any "Yes" answer and attach additional information if needed.)

1. Will modification involve substantial changes that will require major changes to the CEQA document?  
 YES  NO
2. Will modification result in new significant environmental effects or a substantial increase in the severity of previously identified impacts?  
 YES  NO
3. Additional agency notifications and/or permit modifications required?  YES  NO

**Conditions of Approval or Reasons for Denial:** (Attach additional information if needed.)

**Required Signatures:** (Attached email approvals may be used in lieu of signatures.)

**Chief Construction Inspector or Foreman:**  VARIANCE MODIFICATION IS NEEDED FOR SAFE AND EFFICIENT CONSTRUCTION  
Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Environmental Inspector:**  FIELD REVIEW COMPLETE  
Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Land Agent:**  CONSISTENT WITH EXISTING RIGHTS  NEW RIGHTS OBTAINED  
Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Environmental Compliance Lead:**  APPROVED  APPROVED WITH CONDITIONS (SEE CONDITIONS ABOVE)  DENIED  
Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**ATTACHMENT J**

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Temporary Extra Work Space Request Form

ATTACHMENT C  
**TEMPORARY EXTRA WORK SPACE (TEWS) REQUEST**

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Project Name

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TEWS Location/Address

City/County

---

Proposed Use of Site

---

Proposed Date(s) of Use

Proposed Hours of Use

---

Adjacent Land Uses

---

SCE Environmental Compliance Lead (Prepared by)

Date

Biological, Cultural and Paleontological reconnaissance surveys are mandatory for use of any areas containing vegetation, or exposed earth that have not been previously surveyed and fully described in project documents. Biological surveys are mandatory for all temporary extra work sites. Attach a diagram of the proposed area that identifies the location of the site and proximity to sensitive resources or receptors.

Complete the environmental checklist below. Note: **Yes** answers require additional clarification and should be submitted as an attachment to this form.

ATTACHMENT C  
**TEMPORARY EXTRA WORK SPACE (TEWS) REQUEST**

<b>Environmental Checklist</b>	<b>Yes*</b>	<b>No</b>	<b>CPUC Verified</b>
<b>Air Quality:</b> Would equipment be on site or idled for more than 10 minutes? Would there be dust-producing activities?			
<b>Biological Resources:</b> Would use of the site result in potential impacts to sensitive biological resources? Would use of the site result in potential for the spread of noxious weeds?			
<b>Cultural/Paleontological Resources:</b> Would clearing or grading be required?			
<b>Water Resources:</b> Would runoff from the site flow into storm drains or a waterway? Would equipment refueling or maintenance be performed? Would materials block/impact storm drains or gutters?			
<b>Land Use and Recreation:</b> Would use of site block access to local land uses and recreational areas?			
<b>Noise:</b> Are noise-sensitive receptors adjacent to the site? (e.g., homes, schools, care facilities, hospitals, churches convalescent homes, parks, recreational areas)			
<b>Socioeconomics:</b> Would access to business be blocked? Would there be disruption of business operations?			
<b>Traffic:</b> Would parking be eliminated? Would increased construction traffic result in impacts? Is the site a residential area?			
<b>Visual:</b> Would lights at site create glare for adjacent land uses (including roadways)?			

Standard Conditions of Approval

- The CPUC, via its designated Environmental Monitor, will review and approve/deny the Temporary Extra Workspace Request (TEWS) request within four business days of receiving this completed form.
- Use of TEWS is limited to 60 days. First proposed date of use: \_\_\_\_\_
- Use of TEWS shall be in compliance with local ordinances (including traffic/noise) and mitigation measures.
- If any signs of cultural resources are identified, work shall cease immediately and the site shall be reevaluated.
- The proposed site shall not be used for storage of fuel or hazardous materials.
- All drips, leaks, and/or spills from vehicles and/or equipment shall be cleaned-up immediately and disposed of in appropriate, labeled containers.
- Adjacent streets shall be swept or cleaned with water at the end of each workday if visible soil material is carried on them.
- No parking or storage of vehicles (including personnel vehicles), equipment, pipe, or any other project-related item shall be allowed on adjacent roadways.
- If a complaint is received, it shall be forwarded to the SCE Environmental Compliance Lead and the CPUC Environmental Monitor for review.

The following signatures indicate that the proposed site is approved for TEWS. On a random basis, a CPUC Environmental Monitor will verify that use of the proposed site is in accordance with the conditions noted. This approval may be revoked at any time by any one of the approval team. Failure to comply with all conditions will result in immediate revocation of this TEWS approval.

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Property Owner \_\_\_\_\_ Date \_\_\_\_\_

---

SCE Construction \_\_\_\_\_ Date \_\_\_\_\_

---

SCE Environmental Compliance Lead \_\_\_\_\_ Date \_\_\_\_\_

The above TEWS request and attached documentation have been reviewed and this request is \_\_\_\_\_ approved or \_\_\_\_\_denied (*X one*).

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CPUC Environmental Monitor \_\_\_\_\_ Date \_\_\_\_\_

**Additional CPUC Conditions of Approval**

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(CPUC Monitor Initial \_\_\_\_\_)

REASON(S) FOR DENIAL: