

**Habitat Assessments
for the
Public Safety Enterprise Communication Project
Riverside, Orange, San Bernardino, and
San Diego Counties, California**

Prepared for:

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- Line
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- Margarita (SDSU)
- Marshall
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- Mecca Landfill
- Meniffee

Morongo
Paradise
Quail Valley
Rancho Carrillo
Ranger Peak
Red Mountain
Redondo Mesa
Rice
Road 177
Santa Rosa Peak
Santiago Peak
Spring Hill
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Temescal
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ACRONYMS

BLM	Bureau of Land Management
BMP	Best Management Practice
CDCA	California Desert Conservation Area Plan (BLM)
CDFG	California Department of Fish and Game
CDNPA	California Desert Native Plant Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG Code	California Fish and Game Code
CNDDB	California Natural Diversity Database
CNF	Cleveland National Forest
CNFMP	Cleveland National Forest Management Plan
CNPS	California Native Plant Society
CSC	California Species of Special Concern
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVA	Coachella Valley amendment to the CDCA
CVAG	Coachella Valley Association of Governments
CVCC	Coachella Valley Conservation Commission
CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
EPD	Riverside County Environmental Planning Department
FAA	Federal Aviation Administration
FCC	Federal Communications Commission

Acronyms

FESA	Federal Endangered Species Act
HANS	Habitat Acquisition and Negotiation Strategy
HCP	Habitat Conservation Plan
MBA	Michael Brandman Associates
MBTA	Migratory Bird Treaty Act
MSHCP	Multiple Species Habitat Conservation Plan
NECD	Northern and Eastern Colorado Desert amendment to the CDCA (BLM)
NEPA	National Environmental Policy Act
NPS	National Park Service
OHWM	Ordinary high water mark
PSEC	Public Safety Enterprise Communication Project
RCA	Western Riverside County Regional Conservation Authority
RCHCA	Riverside County Habitat Conservation Agency
RCIP	Riverside County Integrated Project
RWQCB	Regional Water Quality Control Board
SBNF	San Bernardino National Forest
SBNFMP	San Bernardino National Forest Management Plan
SCRMP	South Coast Regional Management Plan (BLM)
SKR	Stephens' Kangaroo rat
SKRHCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SWANCC	Solid Waste Agency of North Cook County
SWPPP	Storm Water Pollution Prevention Plan
USACE	United States Army Corps of Engineers

USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WMP	West Mojave amendment to the CDCA (BLM)
WRMSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
YRMP	Yuma Resource Management Plan (BLM)

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SECTION 1: INTRODUCTION

At the request of the County of Riverside (County), Michael Brandman Associates (MBA) supported the Public Safety Enterprise Communication (PSEC) project by providing Habitat Assessments of the various communication sites proposed for the PSEC project. The study was conducted to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) requirements, which requires a biological evaluation of projects that may potentially impact natural resources. This assessment also discusses expected impacts which could occur to the selected sites and identifies additional steps that may be required in regards to biological resources. This assessment addresses approximately 50 individual sites located across County of Riverside and portions of neighboring counties.

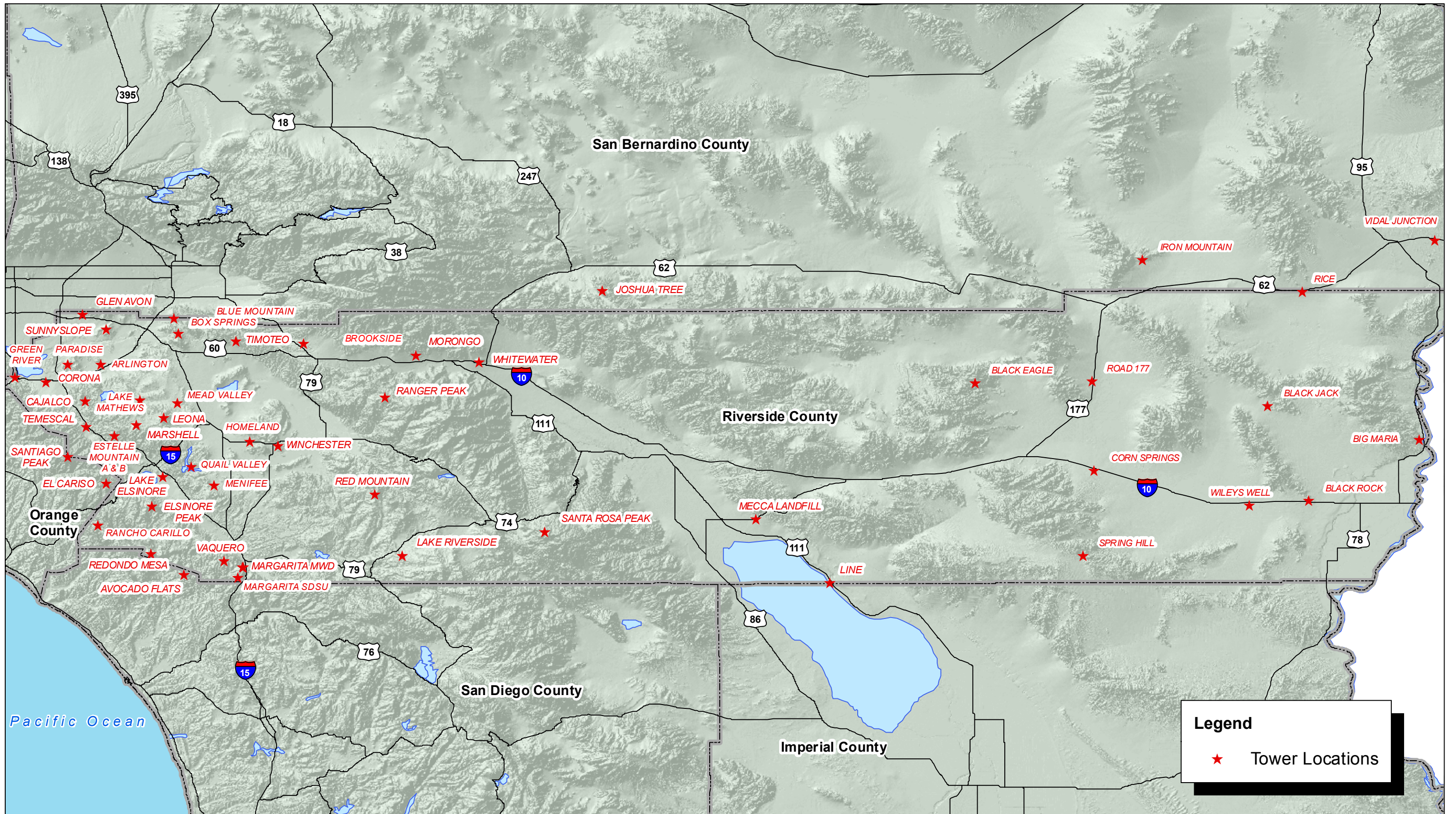
Since this assessment covers more than 50 individual sites, the main body of this habitat assessment presents only a summary of the findings for the entire project. Detailed information for each site regarding existing conditions, sensitive biological resources, applicable management plans, and other information is contained in Appendix A of this document. Readers desiring detailed information about a particular site or those who are interested in how the assessment arrived at the conclusions presented here are directed to the individual site descriptions in Appendix A.

1.1 - Project Description

The PSEC project will expand the Riverside County emergency services radio tower network from the current 20 sites to approximately 50 sites throughout the County (Exhibit 1 and Table 1). By adding the new sites and upgrading existing facilities, the operational coverage of the emergency services telecommunication system will expand to approximately 95 percent of the County's land area, and will also provide greater voice and data transmission capability throughout the County. The specific design, approval, and installation of the entire network is projected to occur over a two to three year period.

Some sites will require construction of additional infrastructure such as access roads and utility lines. However, analysis of these impacts are not included in this report because configuration of these facilities cannot be determined until final site selection and site construction plans are completed. Where applicable, these appurtenant facilities will be analyzed separately at a later time.

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Source: US Census Data and Riverside County



Michael Brandman Associates

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Legend

- ★ Tower Locations

Exhibit 1
Proposed Tower Locations Map

Table 1: Proposed Tower Locations

Candidate Name	County	Assessor's Parcel Number	Latitude	Longitude	Ownership	USGS Topographic Quadrangle	Township	Range	Section
Arlington	Riverside	145-120-002	33° 55' 04.2"	117° 27' 31.2"	Riverside County	Riverside West	3S	6W	12
Avocado Flats	San Diego	101-280-20-00	33° 26' 57.2"	117° 16' 21.0"	BLM	Fallbrook	8S	4W	26
Big Maria	Riverside	815-090-021	33° 45' 04.0"	114° 31' 27.1"	BLM	Big Maria Mts. SE, CA-AZ	5S	23E	12
Black Eagle	Riverside	701-370-008	33° 52' 33.2"	115° 31' 57.1"	Private	Placer Canyon	3S	14E	29 (projected)
Black Jack	Riverside	809-190-002	33° 49' 34.7"	114° 51' 39.6"	BLM	Inca	4S	20E	15
Blue Mountain	San Bernardino	1178-191-04	34° 01' 20.0"	117° 17' 46.5"	Private	San Bernardino South	2S	4W	4
Box Springs	Riverside	256-030-006	33° 57' 42.4"	117° 16' 50.6"	Riverside County	Riverside East	2S	4W	27
Brookside	Riverside	407-170-010	33° 57' 48.7"	117° 00' 20.9"	Riverside County	El Casco	2S	1W	29
Cajalco	Riverside	278-150-005	33° 50' 11.9"	117° 29' 34.3"	MWD	Lake Mathews	4S	6W	10
Corn Springs	Riverside	810-181-001	33° 40' 53.0"	115° 14' 55.1"	BLM	Sidewinder Well	6S	17E	6
Corona	Riverside	118-270-016	33° 52' 44.8"	117° 34' 48.0"	CNUSD	Corona North	3S	7W	25
El Cariso	Orange	125-120-12	33° 38' 44.1"	117° 26' 39.0"	CNF	Alberhill	6S	5W	18
Elsinore Peak	Riverside	382-090-004	33° 36' 08.2"	117° 20' 35.9"	CNF	Wildomar	6S	4W	31
Estelle Mountain (A)	Riverside	391-040-005	33° 45' 37.5"	117° 26' 03.2"	BLM	Lake Mathews	5S	5W	6
Estelle Mountain (B)	Riverside	391-040-005	33° 45' 41.0"	117° 26' 03.2"	BLM	Lake Mathews	5S	5W	6
Glen Avon	Riverside	173-030-009	34° 01' 32.7"	117° 30' 11.0"	JCSD	Guasti	2S	6W	3
Green River	Riverside	101-040-009	33° 53' 21.6"	117° 38' 58.7"	Private	Prado Dam	3S	7W	19

Table 1 (Cont.): Proposed Tower Locations

Candidate Name	County	Assessor's Parcel Number	Latitude	Longitude	Ownership	USGS Topographic Quadrangle	Township	Range	Section
Homeland	Riverside	457-340-027	33° 44' 50.0"	117° 07' 39.3"	Riverside County	Romoland	5S	2W	7
Iron Mountain	San Bernardino	0643-221-07	34° 09' 03.9"	115° 08' 27.1"	MWD	Iron Mountains	1N	17E	26
Joshua Tree	San Bernardino	0589-091-11	34° 04' 52.9"	116° 20' 34.4"	Private	Joshua Tree South	1S	6E	15
Lake Elsinore	Riverside	373-121-002 thru 007	33° 40' 04.0"	117° 19' 07.5"	Private	Lake Elsinore	6S	4W	8
Lake Mathews	Riverside	285-120-030	33° 50' 19.3"	117° 22' 10.9"	MWD	Steele Peak	4S	5W	11
Lake Riverside	Riverside	580-140-014	33° 29' 30.7"	116° 47' 16.0"	Private	Aguanga	8S	2E	9
Leona	Riverside	321-190-005	33° 47' 59.9"	117° 19' 06.1"	Riverside County	Steele Peak	4S	4W	29
Line	Riverside	733-270-015	33° 25' 54.0"	115° 50' 08.2"	Private	Durmid	8S	11E	33
Margarita (MWD)	Riverside	922-210-011	33° 28' 46.7"	117° 08' 46.2"	MWD	Temecula	8S	3W	13 (projected)
Margarita (SDSU)	Riverside	922-220-013	33° 27' 58.1"	117° 08' 30.5"	SDSU	Temecula	8S	3W	24 (projected)
Marshall	Riverside	289-230-023	33° 47' 02.4"	117° 22' 43.4"	Private	Lake Mathews	4S	5W	35
Mead Valley	Riverside	318-180-060	33° 49' 56.7"	117° 17' 14.3"	Riverside County	Steele Peak	4S	4W	10
Mecca Landfill	Riverside	727-242-012	33° 34' 19.2"	116° 00' 01.7"	Riverside County	Mecca	7S	9E	12
Menifee	Riverside	360-290-016	33° 38' 57.3"	117° 12' 19.9"	Riverside County	Romoland	3W	6S	16
Morongo	Riverside	523-140-003	33° 55' 37.2"	116° 45' 13.6"	Private	Cabazon	3S	2E	11
Paradise	Riverside	123-080-052	33° 55' 03.7"	117° 31' 53.5"	Private	Corona North	3S	6W	8

Table 1 (Cont.): Proposed Tower Locations

Candidate Name	County	Assessor's Parcel Number	Latitude	Longitude	Ownership	USGS Topographic Quadrangle	Township	Range	Section
Quail Valley	Riverside	351-111-002 and 351-111-003	33° 41' 23.9"	117° 15' 27.3"	Private	Lake Elsinore	5S	4W	35
Rancho Carrillo	Riverside	901-030-007	33° 33' 35.0"	117° 27' 48.0"	CNF	Sitton Peak	7S	6W	13
Ranger Peak	Riverside	545-130-015	33° 50' 36.5"	116° 49' 30.6"	SBNF	Lake Fulmor	4S	1E	1
Red Mountain	Riverside	569-050-013	33° 37' 46.1"	116° 50' 54.1"	SBNF	Blackburn Canyon	6S	1E	23
Redondo Mesa	Riverside	932-060-052	33° 29' 46.5"	117° 20' 42.8"	RCWD	Fallbrook	8S	4W	7 (projected)
Rice	Riverside	801-080-003	34° 04' 45.2"	114° 47' 07.4"	BLM	Rice	1S	21E	21
Road 177	Riverside	800-101-036	33° 52' 54.6"	115° 15' 07.7"	BLM	Coxcomb Mts	3S	16E	25
Santa Rosa Peak	Riverside	636-210-010	33° 32' 42.4"	116° 28' 09.9"	Riverside County	Toro Peak	7S	5E	21
Santiago Peak	Riverside	290-170-012	33°42' 41.9"	117° 31' 51.8"	CNF	Santiago Peak	5S	6W	29
Spring Hill	Riverside	860-040-015	33° 29' 32.3"	115° 16' 22.3"	BLM	Augustine Pass	8S	16E	12 (projected)
Sunnyslope	Riverside	183-240-027	33° 59' 48.6"	117° 26' 42.7"	JCSD	Riverside West	2S	5W	18
Temescal	Riverside	283-150-017	33° 46' 49.5"	117° 29' 26.5"	CNUSD	Lake Mathews	4S	6W	34
Timoteo	Riverside	473-110-019	33° 58' 16.3"	117° 09' 34.5"	RCHCA	Sunnymead	2S	3W	26
Vaquero	Riverside	939-110-002	33° 28' 51.1"	117° 11' 00.0"	RCWD	Temecula	8S	3W	15 (projected)
Vidal Junction	San Bernardino	0647-321-19 and 0647-321-20	34° 11' 37.3"	114° 29' 20.3"	BLM	Parker NW	1N	24E	8
Whitewater	Riverside	516-130-011	33° 55' 26.2"	116° 37' 01.1"	BLM	Desert Hot Springs	3S	3E	12
Wileys Well	Riverside	818-112-004	33° 36' 18.5"	114° 54' 09.3"	BLM	Hopkins Well	6S	20E	33

Table 1 (Cont.): Proposed Tower Locations

Candidate Name	County	Assessor's Parcel Number	Latitude	Longitude	Ownership	USGS Topographic Quadrangle	Township	Range	Section												
Winchester	Riverside	465-050-019	33° 44' 10.0"	117° 03' 48.7"	Private	Winchester	5S	2W	14												
<p>Notes: All Coordinates Utilize NAD 83 Datum</p> <p>Abbreviations:</p> <table> <tbody> <tr> <td>BLM = Bureau of Land Management</td> <td>MWD = Metropolitan Water District</td> </tr> <tr> <td>CNF = Cleveland National Forest</td> <td>NPS = National Park Service</td> </tr> <tr> <td>CNUSD = Corona-Norco Unified School District</td> <td>RCHCA = Riverside County Habitat Conservation Agency</td> </tr> <tr> <td>EMWD = Eastern Municipal Water District</td> <td>RCWD = Rancho California Water District</td> </tr> <tr> <td>EVMWD = Elsinore Valley Municipal Water District</td> <td>SDSU = San Diego State university Foundation</td> </tr> <tr> <td>JCSD = Jurupa Community Services District</td> <td>USGS = United States Geological Survey</td> </tr> </tbody> </table>										BLM = Bureau of Land Management	MWD = Metropolitan Water District	CNF = Cleveland National Forest	NPS = National Park Service	CNUSD = Corona-Norco Unified School District	RCHCA = Riverside County Habitat Conservation Agency	EMWD = Eastern Municipal Water District	RCWD = Rancho California Water District	EVMWD = Elsinore Valley Municipal Water District	SDSU = San Diego State university Foundation	JCSD = Jurupa Community Services District	USGS = United States Geological Survey
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CNUSD = Corona-Norco Unified School District	RCHCA = Riverside County Habitat Conservation Agency																				
EMWD = Eastern Municipal Water District	RCWD = Rancho California Water District																				
EVMWD = Elsinore Valley Municipal Water District	SDSU = San Diego State university Foundation																				
JCSD = Jurupa Community Services District	USGS = United States Geological Survey																				

SECTION 2: REGULATORY AND RESOURCE MANAGEMENT REQUIREMENTS

The PSEC project sites are located across a vast area and are subject to more than a dozen different management plans, regulations, or similar directives that determine how biological resources are to be managed. This section discusses each of these plans and directives and identifies which of them applies to each site. Readers desiring more detailed information about the regulations and management plans that are applicable to a particular site are directed to the individual site descriptions contained in Appendix A of this document.

2.1 - Sensitive Species Directives

2.1.1 - Federal Endangered Species Act (FESA)

Overview

The U.S. Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (FESA). The FESA provides a process for listing species as either threatened or endangered, and methods of protecting listed species. The FESA defines as “endangered” any plant or animal species that is in danger of extinction throughout all or a significant portion of its known geographic range. A “threatened” species is a species that is likely to become endangered. A “proposed” species is one that has been officially proposed by the USFWS for addition to the federal threatened and endangered species list.

FESA prohibits “take” of threatened or endangered species. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. Take can include disturbance to habitats used by a threatened or endangered species during any portion of its life history. The presence of any federally threatened or endangered species in a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the FESA, the USFWS may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

Section 7 and Section 10 Compliance

There are two sections of the FESA, Sections 7 and 10, that authorize incidental take. Section 7 regulates take associated with federal projects or projects that require a federal permit. Section 10 regulates take on non-federal lands or for projects without a federal nexus.

Federal agencies must undertake programs for the conservation of endangered and threatened species, and are prohibited from authorizing, funding, or carrying out any action that will jeopardize a listed species, in addition to its “critical habitat.” As defined in the FESA, “individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding.”

Even though the project is being undertaken by a non-federal entity, the PSEC project is subject to Section 7 of the FESA due to the presence of critical habitat at several of the sites. Before the project can utilize public airwaves, the project will also need to receive licenses from the Federal Communications Commission (FCC), which is a federal agency. In addition, many of the sites are located on lands that are managed by either the Bureau of Land Management (BLM) or the U.S. Forest Service (USFS), and these federal agencies will need to grant authorization and issue use permits for sites proposed on their lands. Therefore, a federal nexus is established and the rules of Section 7 of the FESA will apply to the project.

Sites that are located within the boundaries of an approved Multiple Species Habitat Conservation Plan (MSHCP) must also follow procedures specific to the plan's implementation. This is an independent process from the Section 7 process. Some procedures are incorporated into MSHCPs to streamline the Section 7 process but are specific to each MSHCP. MSHCP's are discussed in detail below. In these cases, Section 7 consultation is not required, so long as conservation measures required under the terms of the MSHCP are followed. Exhibit 2 identifies the sites that are located within a designated critical habitat area.

USFWS often designates Critical Habitat for a site if there is a federal nexus for the project. This is considered habitat that is necessary for the species survival and eventual recovery. Projects that are proposed within critical habitat can be subject to clearance under Section 7 of the FESA regardless of the presence or absence of a species from the project site.

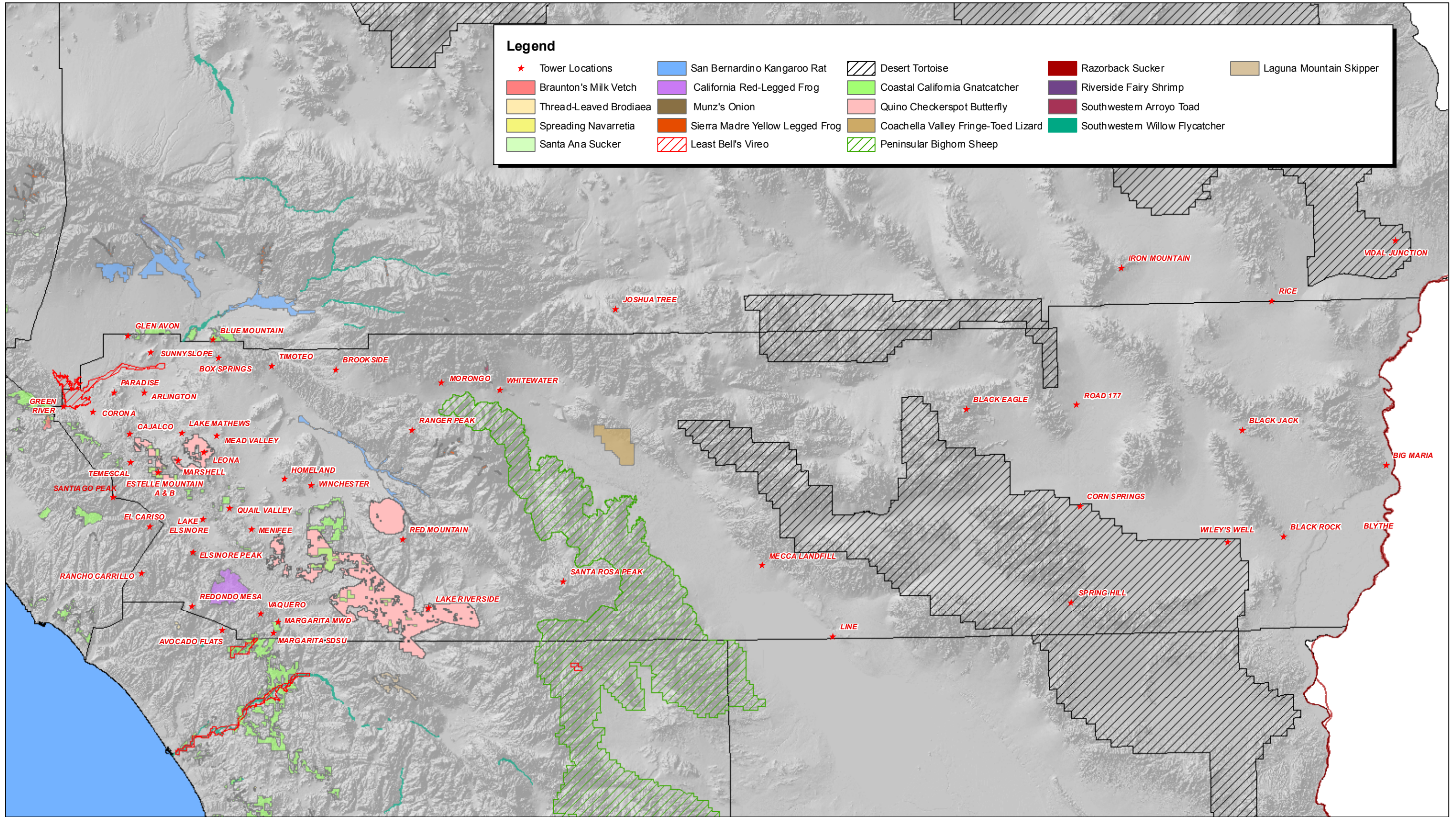
2.1.2 - California Endangered Species Act (CESA)

Overview

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy; a threatened species as one present in such small numbers throughout its range that it is considered likely to become an endangered species in the near future in the absence of special protection or management; and a rare species as one present in such small numbers throughout its range that it may become endangered if its present environment worsens. The designation "rare species" applies only to California native plants. State threatened and endangered species include both plants and wildlife (not including invertebrates) and are legally protected against "take" as this term is defined in the CESA.

California Species of Special Concern (CSC) status applies to animals not listed under the FESA or CESA, but which nonetheless are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. CSC species share one or more of the following criteria:

- 1) Occur in small, isolated populations or in fragmented habitat, and are threatened by further isolation and population reduction;



Source: US Census data and Riverside County.

- 2) Show marked population declines. Population estimates are unavailable for the vast majority of taxa. Species that show a marked population decline, yet are still abundant, do not meet the Special Concern definition, whereas marked population decline in uncommon or rare species is an inclusion criterion;
- 3) Depend on a habitat that has shown substantial historical or recent declines in size. This criterion infers the population viability of a species based on trends in the habitats upon which it specializes. Coastal wetlands, alluvial fan sage scrub and coastal sage scrub in the southern coastal basins, and arid scrub in the San Joaquin Valley, are examples of California habitats that have seen dramatic reductions in size in recent history. Species that specialize in these habitats generally meet the criteria for Threatened or Endangered status or Special Concern status;
- 4) Occur only in or adjacent to an area where habitat is being converted to land uses incompatible with the animal's survival;
- 5) Have few California records, or which historically occurred here but for which there are no recent records; and
- 6) Occur largely on public lands, but where current management practices are inconsistent with the animal's persistence.

This designation is intended to result in special consideration for these animals by the California Department of Fish and Game (CDFG), land managers, and others, and is intended to focus attention on the species to help avert the need for costly listing under federal and State endangered species laws and cumbersome recovery efforts that might ultimately be required. This designation does not provide specific legal protection, but signifies that these species are recognized as vulnerable by CDFG.

2.1.3 - Western Riverside County Multiple Species Conservation Plan (WRMSHCP)

Overview

The Western Riverside County Multiple Species Conservation Plan (WRMSHCP) is a multi-jurisdictional Habitat Conservation Plan focusing on conservation of species and their associated habitats on non-federal lands in western Riverside County. The WRMSHCP allows participating jurisdictions within the plan area to incorporate projects onto the County's incidental "take" permit by complying with a series of implementing requirements, including payment of a Development Mitigation Fee. It is the intent of this process to give participants full mitigation under CEQA, NEPA, CESA, and FESA for impacts to the species and habitats covered by the WRMSHCP. The WRMSHCP is administered by the Riverside County Regional Conservation Authority (RCA). Exhibit 3 identifies the sites that are located within the WRMSHCP area.

Implementation

A critical component of the WRMSHCP process is the submittal of a habitat assessment and a Habitat Evaluation and Acquisition Negotiation Strategy (HANS) application. Anyone seeking a discretionary permit for property must first conduct a habitat assessment of the site to document site conditions. If the project site is in a criteria cell or conservation area, they must also fill out a HANS application. A criteria cell is land that has been identified as an area where conservation potentially needs to occur. Criteria cells were created to help guide the assembly of reserve lands and preserve identified core habitat areas. Once the habitat assessment and HANS application is deemed complete, the jurisdictional agency will issue a Consistency Determination Letter. The application and letter is then reviewed by the RCA.

Certain areas within the WRMSHCP boundaries require focused surveys be conducted in areas where suitable habitat exist to support certain species and resources, such as vernal pool plants, burrowing owl, riparian areas, and riparian plant and wildlife species. If it can be shown that an area clearly does not contain suitable habitat, this requirement can be eliminated. If additional surveys are required and depending on their outcome, the area could be considered occupied suitable habitat and if it is unfeasible to conserve 90 percent of this area, then the applicant must submit an analysis supporting a Determination of Biologically Equivalent or Superior Preservation (DBESP). The DBESP discussion lists why avoidance is not possible, quantifies unavoidable impacts, proposes project design features and mitigation measures that reduce indirect effects, and demonstrates that the project would be biologically equivalent or superior to “avoidance.”

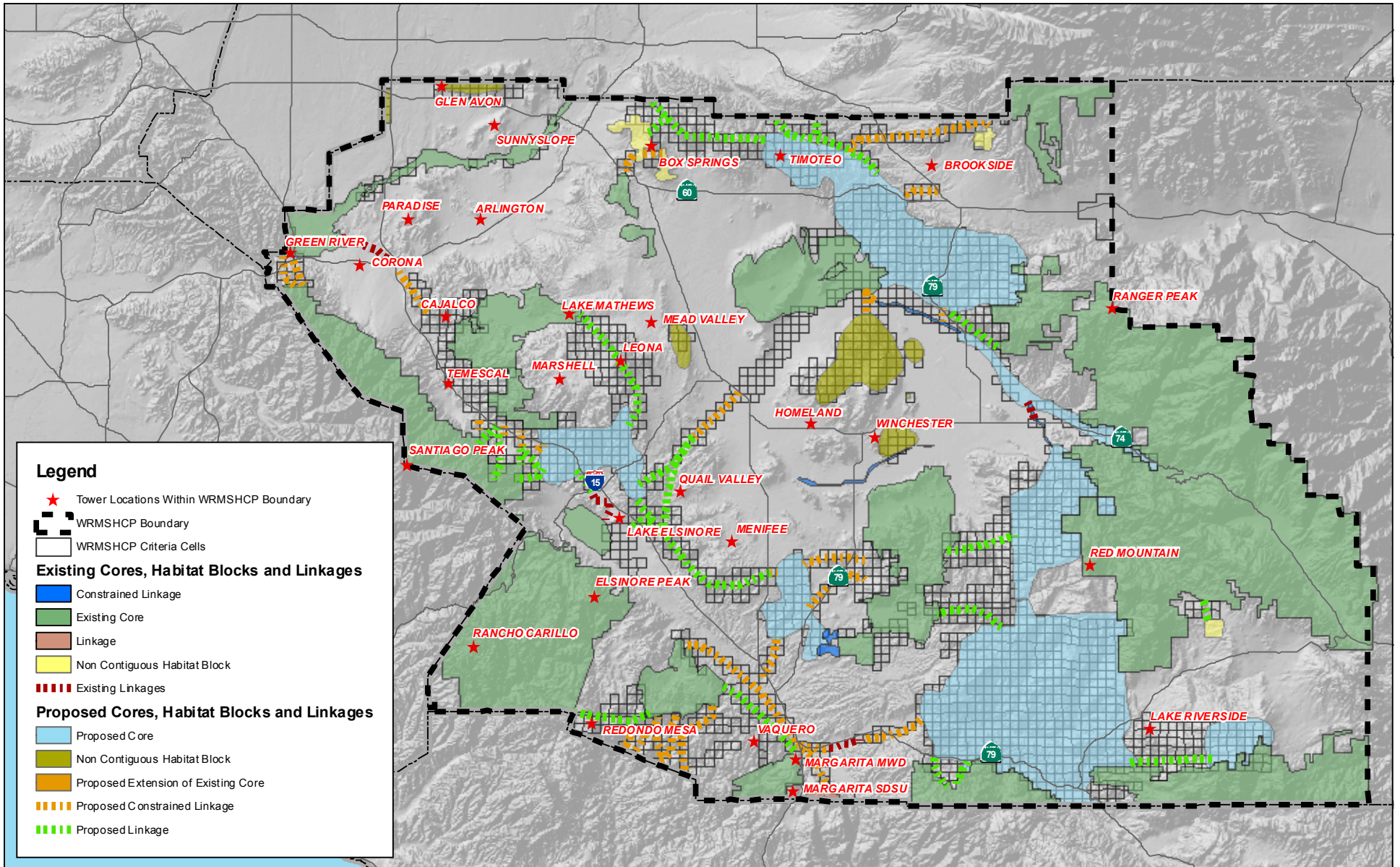
2.1.4 - Western Riverside County Habitat Conservation Plan for Stephens' Kangaroo Rat (SKRHCP)

Overview

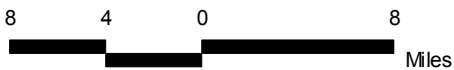
Prior to the adoption and implementation of the WRMSHCP, the County had previously adopted a separate Habitat Conservation Plan for Stephens' kangaroo rat (SKRHCP). This plan remains in effect and must be complied with separate from the WRMSHCP. Stephens' kangaroo rat is federally listed as endangered and state listed as threatened. As with the WRMSHCP, participants of the SKRHCP can incorporate projects into the incidental “take” permit for Stephens' kangaroo rat if the project complies with the requirements of the SKRHCP. Payment of the mitigation fees and compliance with the SKRHCP provides full mitigation under CEQA, NEPA, and the CESA and FESA for impacts to Stephens' kangaroo rat. Compliance with the WRMSHCP accounts for impacts to Stephens' kangaroo rat habitat outside of the SKRHCP boundaries but inside the WRMSHCP boundaries. Exhibit 4 illustrates the sites that are within the SKRHCP area.

Implementation

In addition to the fee requirement for projects developed within an SKRHCP Fee Area, several reserve areas have been established that are intended to conserve suitable habitat for the species.



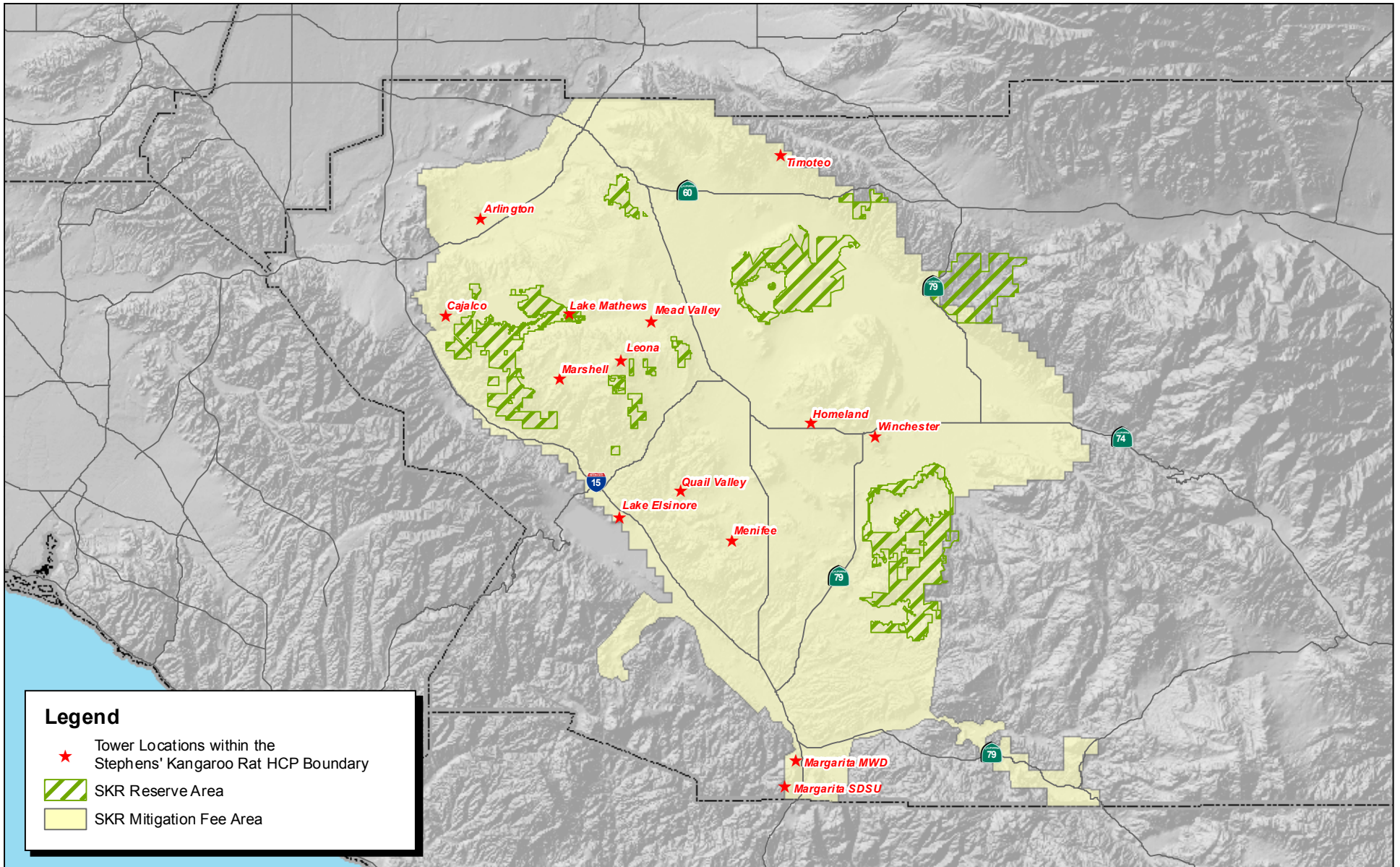
Source: USGS NED, Riverside County MSHCP, Census 2000 data.



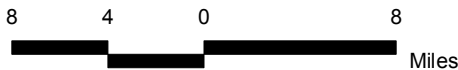
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Exhibit 3
 Western Riverside County
 Multiple Species Habitat Conservation Plan Map

COUNTY OF RIVERSIDE • PSEC PROJECT
 BIOLOGICAL RESOURCES ASSESSMENT



Source: USGS NED, Riverside County MSHCP, Census 2000 data.



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Exhibit 4 Stephens' Kangaroo Rat Habitat Conservation Plan Map

COUNTY OF RIVERSIDE • PSEC PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Proposed projects within these areas are required to conduct focused surveys for the species and undergo review by the appropriate agency.

In order to carry out their responsibility to ensure the health, safety, and welfare of the general public, public agencies in the SKRHCP area must maintain their ability to construct public facilities identified in General Plans, Transportation Improvement Plans, Capital Improvement Plans, and other adopted documents. Accordingly, under the terms of the SKRHCP public agencies are permitted to construct public facilities including, but not limited to, the following:

- 1) Construction of public roadways to their ultimate width as identified in adopted General Plans;
- 2) Construction of improvements identified in adopted local Transportation Improvement Programs;
- 3) Construction of cooperative projects undertaken between public agencies in the SKRHCP area and other cities, counties, water districts, Caltrans, the U.S. Army Corps of Engineers (USACE), and any other federal and State agencies; and
- 4) Construction of other public facilities and projects identified in adopted local General Plans or Capital Improvement Programs.

Construction of the above public facilities are permitted in core reserves provided that the sponsoring agency mitigates on a 1:1 basis for all SKR occupied habitat disturbed as a result of the project. Specifically, for each acre of SKR occupied habitat disturbed in a core reserve, the sponsoring agency will acquire and permanently dedicate to SKR conservation a replacement acre of SKR occupied habitat. The location of such replacement acreage is be subject to approval by USFWS and CDFG.

2.1.5 - Coachella Valley Multiple Species Conservation Plan (CVMSHCP)

Overview

As with the WRMSHCP, the objective of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) is to balance environmental protection and economic development objectives in the plan area and simplify compliance with endangered species and related laws on non-federal lands. The CVMSHCP is intended to satisfy the legal requirements for the issuance of permits that will allow the take of species covered by the CVMSHCP in the course of otherwise lawful activities. The CVMSHCP will, to the maximum extent practicable, minimize and mitigate the impacts of the taking and provide for conservation of the covered species. Exhibit 5 identifies the sites that are located within the CVMSHCP area.

The CVMSHCP plan has yet to be adopted but is expected to be adopted in the near future. Once adopted, the plan will be administered by the Coachella Valley Conservation Commission (CVCC). In the interim, the County and the Coachella Valley Association of Governments (CVAG) are administrators of an interim program in advance of the final approval and adoption of the

CVMSHCP. This interim process mirrors the requirements of the CVMSHCP and all projects need to demonstrate consistency with the requirements of the interim plan.

Implementation

With the final adoption of the CVMSHCP, the establishment of the CVMSHCP reserve system will result in assembled lands from within 21 conservation areas. For each conservation area, conservation objectives are articulated for conserving core habitat for covered species, essential ecological processes necessary to maintain habitat viability, biological corridors and linkages as needed, and the less common, conserved natural communities. At this time, core habitat have not been delineated for all species. Where they have not been delineated, conservation objectives are stated for either acres of habitat or known occurrences. At this time, it remains unclear exactly what specific requirements must be met for projects within designated conservation areas, but general guidance within the CVMSHCP is as follows:

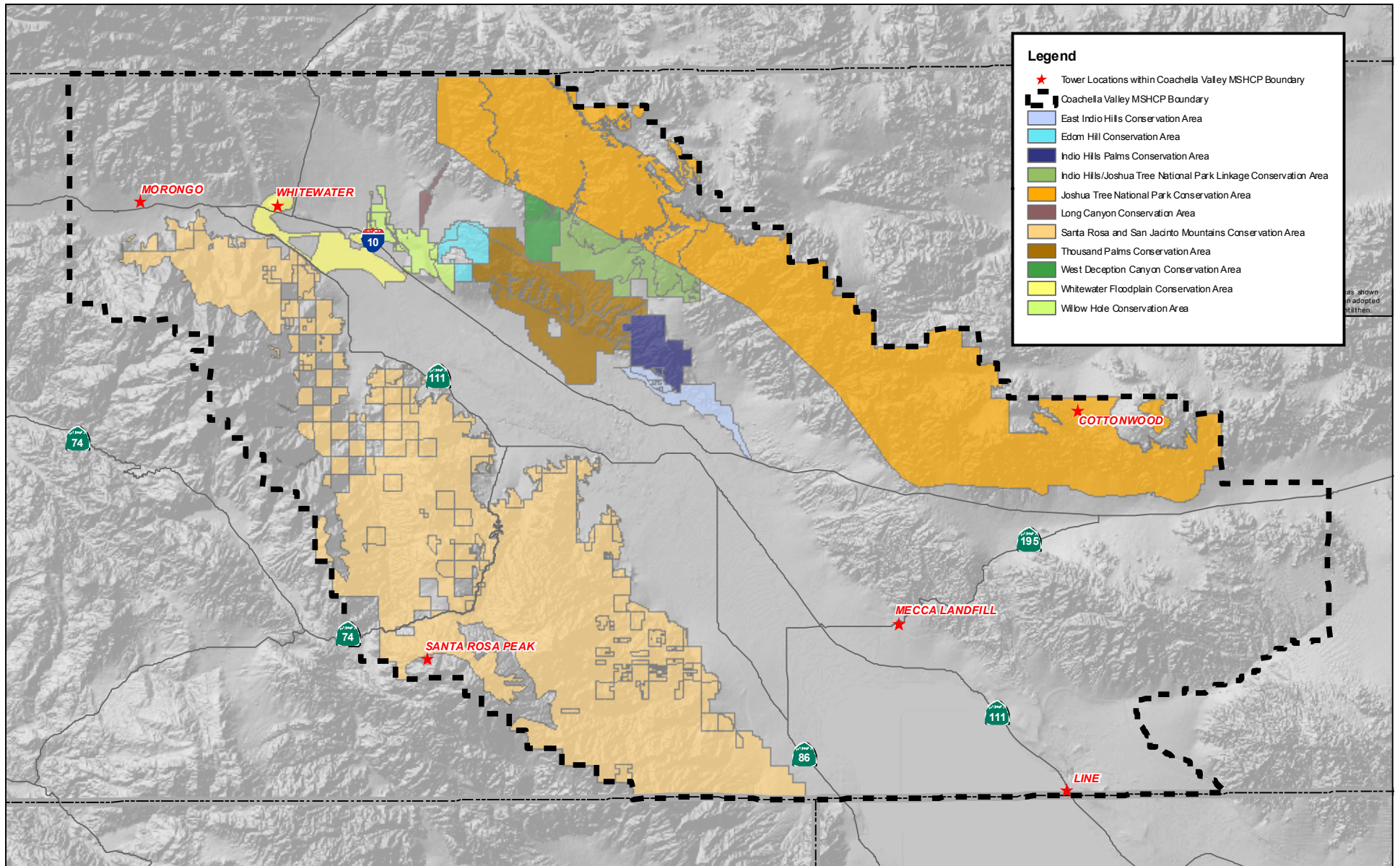
The USFWS and CDFG and the permittee shall jointly review proposed permittee projects that are within designated Conservation Areas. Permittees shall submit project information to the USFWS and CDFG and CVCC, including, at a minimum, a project description and a concept map indicating the location of the proposed project. USFWS and CDFG or the permittee may schedule a meeting to discuss a proposed project. CVCC shall be invited to participate in this meeting.

Once the CVMSHCP is fully in place, the approval of the CVMSHCP and execution of the implementing agreement will allow signatories to issue “take” authorizations for all species covered by the CVMSHCP, including state and federally listed species as well as other identified covered species and/or their habitats. Each jurisdiction within the Coachella Valley will impose a development mitigation fee for projects within their jurisdiction. Compliance with the CEQA, NEPA, CESA, and FESA will be achieved by compliance with the survey requirements of the CVMSHCP and payment of the mitigation fees.

2.1.6 - California Desert Native Plants Act (CDNPA)

Overview

The CDNPA was created to protect specific naturally occurring native desert plant species growing in Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties. The act has two principal sections, and different levels of protection are provided for the various plants listed in each section. Species listed in Section 80072 of the act are afforded a greater level of protection than those listed in Section 80073.



Legend

- ★ Tower Locations within Coachella Valley MSHCP Boundary
- ▬ Coachella Valley MSHCP Boundary
- East Indio Hills Conservation Area
- Edom Hill Conservation Area
- Indio Hills Palms Conservation Area
- Indio Hills/Joshua Tree National Park Linkage Conservation Area
- Joshua Tree National Park Conservation Area
- Long Canyon Conservation Area
- Santa Rosa and San Jacinto Mountains Conservation Area
- Thousand Palms Conservation Area
- West Deception Canyon Conservation Area
- Whitewater Floodplain Conservation Area
- Willow Hole Conservation Area

Source: CVAG.

CDNPA Section 80072 Plants

The plant species listed in Section 80072 of the CDNPA can only be harvested or impacted under a scientific or educational permit as issued by the appropriate County Agricultural Commissioner. These plant species include saguaro cactus, (*Carnegiea gigantea*), barrel cactus (*Ferocactus acanthodes*), crucifixion thorn (*Castela emoryi*), panamint dudleya (*Dudleya saxosa*), bristlecone pine (*Pinus longaeva*), fan palm (*Washingtonia filifera*), and all species of elephant tree (Burseraceae family).

With the exception of barrel cactus, all of the plant species listed above either do not occur within the area of the PSEC project or they occur only sporadically. During the site surveys conducted as part of the general habitat assessment, the only Section 80072 species observed was barrel cactus at the Morongo site. Typically, avoidance of specific plants is the best method to minimize impacts to these plants. If avoidance is not feasible, then the County will be required to obtain a scientific or educational permit for their removal at the Morongo site, and the removal will need to be undertaken by a qualified biologist.

CDNPA Section 80073 Plants

The plant species listed in Section 80073 of the CDNPA may be harvested or impacted by a much broader range of activities, including construction activities, but a permit from the appropriate County Agricultural Commissioner or Sheriff's Department must be obtained prior to impacts. These plant species include all species of the Agavaceae (agave) and Fouquieriaceae (ocotillo) families, all species of the Prosopis (mesquite) and Cercidium (palo verde) genus, catclaw acacia (*Acacia greggii*), desert-holly (*Atriplex hymenelytra*), smoke tree (*Dalea spinosa*) and desert ironwood (*Olneya tesota*). All the plant species of the cactus (Cactaceae) family are also included, with the exception of those listed in Section 80072.

2.1.7 - California Native Plant Society (CNPS)

Overview

The CNPS is a statewide resource conservation organization that has developed an inventory of California's special-status plant species. This inventory is a summary of information on the distribution, rarity, and endangerment of California's vascular plants. This rare plant inventory consists of four lists. CNPS presumes that List 1A plant species are extinct in California because they have not been seen in the wild for many years. CNPS considers List 1B plants as rare, threatened, or endangered throughout their range. List 2 plant species are considered rare, threatened, or endangered in California, but more common in other states. Plant species on lists 1A, 1B, and 2 meet CDFG criteria for endangered, threatened, or rare listing. Plant species for which CNPS requires additional information in order to properly evaluate their status are included on List 3. List 4 plant species are those of limited distribution in California whose susceptibility to threat is considered low at the current time.

The CNPS listing is a guideline for lead agencies to assist in identification of plant species that are rare in California. The goal is to establish awareness of native plants and take action to avoid or reduce impacts to plants on the list.

2.1.8 - Nesting and Migratory Birds

Overview

The Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs.

The CDFG administers the California Fish and Game Code (CFG Code). There are particular sections of the CFG Code that are applicable to natural resource management. For example, Section 3503 states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird that is protected under the MBTA. The code further protects all birds of prey such as hawks and owls and their eggs and nests from any form of take.

Implementation

Based on the requirements of the MBTA and the CFG Code, it is unlawful to disturb the nests of birds during nesting season. Nesting season is typically considered to begin on February 1 and run through August 31, and disturbance to nesting birds may not occur during that time period. Avoidance of nesting birds is the only way to eliminate impacts during nesting season. Obviously, the best way to avoid impacts to nesting birds is to perform any potential nest-disturbing activities such as construction outside of the nesting season (i.e., September 1 through January 31). If construction must occur during the nesting season, then preconstruction nesting bird surveys must be conducted no more than 7 days prior to initiation of construction. If nests are discovered, they must be avoided by an appropriate buffer, as determined by a qualified wildlife biologist. The temporary “no construction” area would need to be maintained until the nest has completed its cycle, as determined by a qualified wildlife biologist. Once the nesting cycle has been completed, construction in the area may resume. The procedures noted above would need to be followed for all PSEC sites where nesting bird habitat is present.

2.2 - Jurisdictional Waters and Wetlands

Impacts to natural drainage features and wetland areas are regulated by USACE, the Regional Water Quality Control Board (RWQCB), and CDFG based upon the policies and regulations discussed below.

2.2.1 - United States Army Corp of Engineers Regulations

Federal Clean Water Act – Section 404

USACE administers Section 404 of the federal Clean Water Act (CWA). This section regulates the discharge of dredge and fill material into waters of the U.S. USACE has established a series of nationwide permits that authorize certain activities in waters of the U.S., if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acre of waters of the U.S. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. Use of any nationwide permit is contingent on the activities having no impacts to endangered species.

Waters of the United States

Waters of the U.S., as defined in the Code of Federal Regulations, include all waters or tributaries to waters such as lakes, rivers, intermittent and perennial streams, mudflats, sand-flats, natural ponds, wetlands, wet meadows, and other aquatic habitats. Frequently, waters of the U.S., with at least intermittently flowing water or tidal influences, are demarcated by an ordinary high water mark (OHWM). The OHWM is defined as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. In the southern California region, where streams are typically intermittent in their flows, the OHWM is typically indicated by the presence of an incised streambed with defined bank shelving.

In 2001, the USACE South Pacific Division issued *Guidelines for Jurisdictional Delineations for Waters of the United States in the Arid Southwest*. The purpose of this document was to provide background information concerning physical characteristics of dry land drainage systems. These guidelines were reviewed and used to identify jurisdictional drainage features at each of the PSEC sites.

Wetlands

According to the USACE Wetlands Delineation Manual, three criteria must be satisfied to classify an area as a jurisdictional wetland:

1. A predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation);
2. Soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils); and
3. Permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology).

Wetland vegetation is characterized by vegetation in which more than 50 percent of the composition of dominant plant species are obligate wetland, facultative wetland, and/or facultative species that occur in wetlands. As a result of the 2001 Solid Waste Agency of North Cook County (SWANCC) case, a wetland must show connectivity to a stream course in order for such a feature to be considered jurisdictional.

United States Army Corp of Engineers Regulated Activities

The USACE regulates the discharge of dredged or fill material including, but not limited to, grading, placing of rip-rap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. Activities that generally do not involve a regulated discharge, if performed specifically in a manner to avoid discharges, include driving pilings, drainage channel maintenance, temporary mining and farm/forest roads, and excavating without stockpiling.

2.2.2 - Regional Water Quality Control Board Regulations

Clean Water Act – Section 401

Per Section 401 of the CWA, “any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.” Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB.

Porter-Cologne Water Quality Act

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the state,” pursuant to provisions of the Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.”

Regional Water Quality Control Board Regulated Activities

Under Section 401 of the CWA, the RWQCB regulates all activities that are regulated by the USACE. Additionally, under the Porter-Cologne Water Quality Act, the RWQCB regulates all activities, including dredging, filling, or discharge of materials into waters of the state that are not regulated by the USACE due to a lack of connectivity with a navigable water body and/or lack of an OHWM.

Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling, or

excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.

If a single project traverses more than one RWQCB jurisdiction, a complete Notice of Intent package (Notice of Intent, site map, and fee) and Notice of Termination (upon completion of each section), must be filed with each RWQCB.

2.2.3 - California Department of Fish and Game Regulations

California Fish and Game Code – Sections 1600 to 16003

The CFG Code mandates that “it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity.” CDFG jurisdiction includes ephemeral, intermittent, and perennial watercourses, including dry washes, characterized by the presence of hydrophytic vegetation, the location of definable bed and banks, and the presence of existing fish or wildlife resources.

Furthermore, CDFG jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFG jurisdiction to include watercourses that seemingly disappear, but re-emerge elsewhere. Under the CDFG definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction. However, CDFG does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake.

California Department of Fish and Game Regulated Activities

The CDFG regulates activities that involve diversions, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife resources.

2.3 - Federal Land Management Plans

2.3.1 - National Forest Land Management Plans

Public lands managed by the USFS either on the Cleveland National Forest (CNF) or the San Bernardino National Forest (SBNF) are subject to their respective Land Management Plans. The strategic direction delineated in the two plans is used to guide all natural resource management activities within the CNF and SBNF. The plans define the desired conditions on the forests and provide direction for land use zoning, design criteria, and the monitoring required to achieve those desired conditions. As such, any project that is proposed in these areas must be evaluated in terms of its ability to meet the desired conditions of the national forest. Both land management plans provide specific guidance in regards to the management of biological resources. Region 5 of the USFS (all national forests in California) maintains a Special Status Species List that identifies species within the region that are of special concern to the agency, and sites located on USFS lands are subject to analysis for species on the list. Exhibit 6 identifies the sites that are located upon USFS-managed lands.

2.3.2 - Bureau of Land Management Resource Management Plans

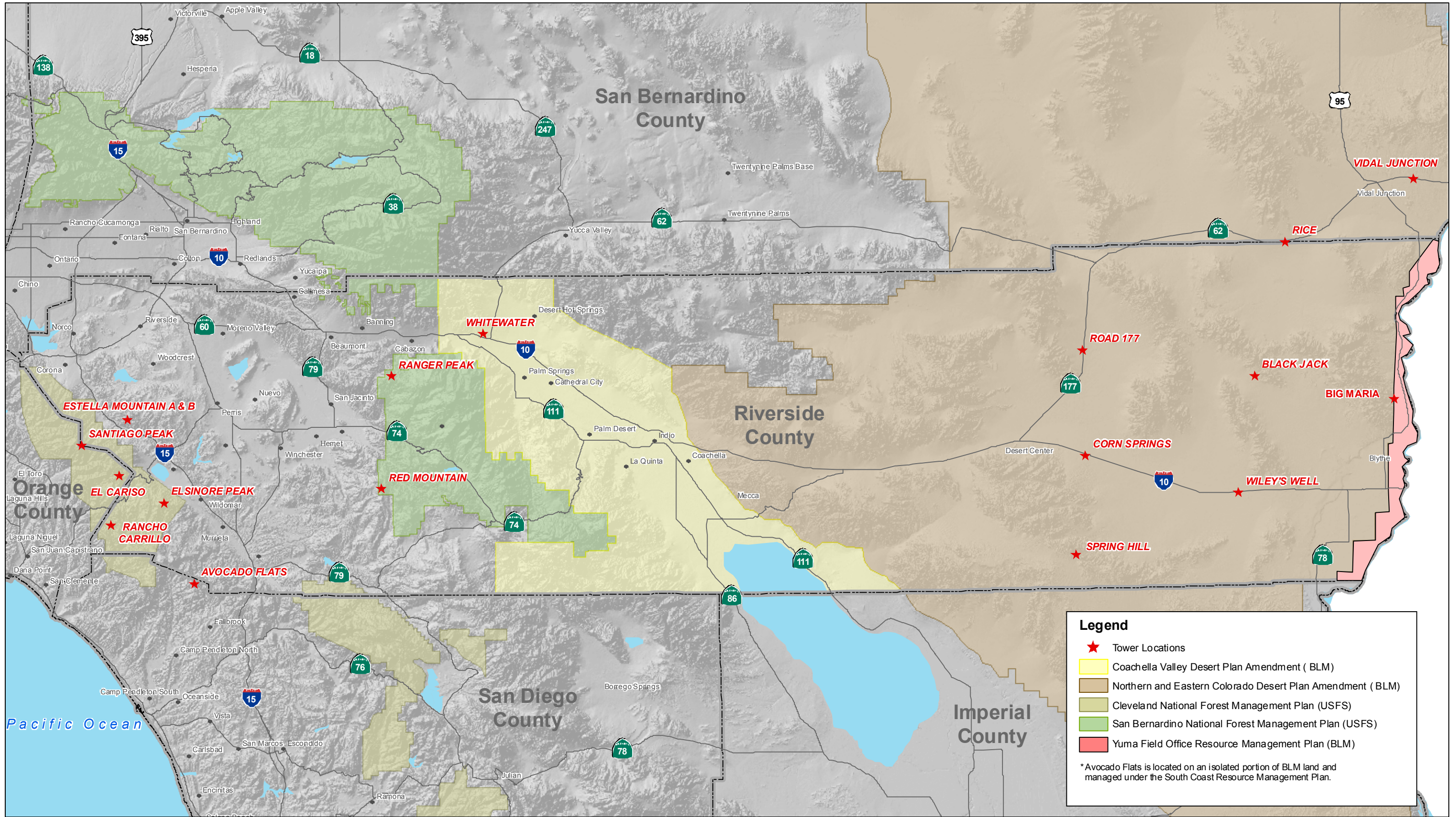
Public lands managed by the BLM are subject to the Resource Management Plans that have been prepared for the various BLM management areas in southern California. Exhibit 6 identifies the sites that are located upon BLM-managed lands.

Yuma Resources Management Plan

The Yuma Resource Management Plan (YRMP) has recently been revised and is within the final stage of approval. The YRMP provides direction for the Yuma Field Office which manages 1.3 million acres of lands within southwestern Arizona and southeastern California along the Colorado River. Issues addressed in the YRMP include fish and wildlife management, wild horse and burro management, recreation management, and maintaining lands with wilderness characteristics.

South Coast Resource Management Plan

The South Coast Resource Management Plan (SCRMP) was originally completed in 1994 and is currently undergoing revision. The SCRMP provides direction for 129,000 acres of land managed by the BLM in the highly urbanized coastal regions of Los Angeles and Orange counties, and the western portions of Riverside, San Bernardino and San Diego counties. The primary management goals include land tenure adjustment, special status and endangered species, open space, recreation and public access, and mineral exploration and development.



Legend

- ★ Tower Locations
- Coachella Valley Desert Plan Amendment (BLM)
- Northern and Eastern Colorado Desert Plan Amendment (BLM)
- Cleveland National Forest Management Plan (USFS)
- San Bernardino National Forest Management Plan (USFS)
- Yuma Field Office Resource Management Plan (BLM)

* Avocado Flats is located on an isolated portion of BLM land and managed under the South Coast Resource Management Plan.

Source: US Census data and Riverside County.

Michael Brandman Associates
27490003 • 05/2008 | 6_Federally_Managed_Land_Plan_Area.mxd

Exhibit 6
Federally Managed Land Plan Areas

California Desert Conservation Area Plan

California Desert Conservation Area Plan (CDCA) was approved in 1980 and provides a multiple use management blueprint for the lands under BLM jurisdiction within a 25-million-acre area in Southern California. The CDCA includes land within Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, and San Bernardino Counties. Six regional amendments have been approved within the CDCA and currently provide specific direction and policy for BLM lands within specific regions. Sites proposed for the PSEC project are located within two of these amendment areas.

Northern and Eastern Colorado Desert Plan Amendment to the CDCA

The Northern and Eastern Colorado Desert (NECD) Plan Amendment to the CDCA was created in 2002 and incorporates 3.8 million acres of desert, which provides aid in the recovery of the desert tortoise and the Coachella Valley milk-vetch. The plan amendment also focuses on conservation of approximately 60 other sensitive species and their habitats on federal lands within Imperial, Riverside and San Bernardino counties, as well as a streamlined process for the issuance of land use permits. The primary goals of the amendment include establishing standards and guidelines for land health, establishing desert wildlife management areas for the desert tortoise and bighorn sheep, and establishing land acquisition priorities.

Coachella Valley Amendment to the CDCA

The Coachella Valley Amendment (CVA) to the CDCA was completed in 2002. This amendment for 331,000 acres of public land was developed in conjunction with the CVMSHCP addressing 27 plant and animal species, 10 of which are federally listed. The primary goals of the amendment include habitat conservation, wild and scenic river eligibility, standards, and guidelines for land health, designation of routes of travel, criteria for land tenure adjustment, and establishment of a special recreation management area.

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SECTION 3: METHODS

Analysis of the biological resources associated with the proposed tower locations began with a thorough review of relevant literature followed by a habitat assessment of each proposed tower location. The habitat assessments covered a 50-foot radius area at each proposed tower location (approximately 0.2 acre). This area is hereafter referred to as the study area. The primary objective of the surveys was to document existing site conditions and to determine the potential presence of sensitive biological resources on and around the proposed tower locations.

Since this assessment covers more than 50 individual sites, the main body of this habitat assessment presents only a summary of the findings for the entire project. Detailed information for each site regarding existing conditions, sensitive biological resources, applicable management plans, and other information is contained in Appendix A of this document. Readers desiring detailed information about a particular site or those who are interested in how the assessment arrived at the conclusions presented here are directed to the individual site descriptions in Appendix A.

For the purpose of this report, the term “sensitive species” refers to all species formally listed as candidate, threatened, and/or endangered under FESA and/or CESA; Federal Species of Concern; California Species of Special Concern, California Fully Protected; CNPS; 1A and 1B listed species; and City, County, or regional designated sensitive species.

Federal and state listed threatened and/or endangered species are legally protected under the FESA and CESA. The remaining species mentioned above have no direct legal protection, but require a significance analysis under the CEQA Guidelines. The study areas located within the CNF and SBNF are also subject to analysis for the species on the USFS Region 5 Special Status Species List. These species include the USFS Sensitive and Watch list species. Study areas located on BLM land are also subject to analysis for species listed in the CDCA.

3.1 - Literature Review

The literature review provides a baseline from which to evaluate the biological resources potentially occurring in the study areas.

3.1.1 - Existing Environmental Documentation

As part of the literature review, MBA examined existing environmental documentation for each of the study areas. This documentation included literature and databases associated with the WRMSHCP, SKRHCP, CVMSHCP, BLM Plans, USFS Plans, plus literature pertaining to habitat requirements of special status species potentially occurring in the vicinity, as well as federal register listings, survey protocols, and species data provided by USFWS and CDFG. These and other documents are listed in references portion of this report.

3.1.2 - Topographic Maps and Aerial Photographs

MBA biologists reviewed current United States Geological Survey (USGS) 7.5-minute topographic quadrangle maps and aerial photographs in the preliminary analysis of the existing conditions within the study areas and their immediate vicinity. Information obtained from the review of the topographic maps included topographic variations, general watershed information, and potential drainage features. Aerial photographs provided an aerial perspective of the most current site conditions for onsite and offsite land-use, plant community locations, and potential locations of wildlife movement corridors. Maps and aerial photographs for each site are included in the individual site descriptions located in Appendix A of this document.

3.1.3 - Soil Surveys

Many sensitive plant species have a limited distribution based exclusively on soil type. The Natural Resource Conservation Service, through the United States Department of Agriculture (USDA), has published soil surveys that describe the soil series that occur within particular areas. Pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the study areas and to establish if soil conditions onsite are suitable for any sensitive plant species. The USDA has not yet completed surveys of all portions of California and some study areas are located in areas not yet surveyed. General soil characteristics were recorded during MBA's habitat assessments and are discussed for the study areas not covered by an existing USDA soil survey. Maps and descriptions of the soils at each site are included in Appendix A of this document.

3.1.4 - Sensitive Species Database Search

MBA compiled a list of threatened, endangered, and otherwise sensitive species previously recorded to occur near each study area. The results of this research is presented in Table 2. The list is based on a search of CDFG's California Natural Diversity Database (CNDDDB), a sensitive species and plant community account database, and the CNPS's Electronic Inventory of Rare and Endangered Vascular Plants of California database for five -mile radius areas around each proposed tower location. The CNDDDB GIS database along with ArcGIS software was used to determine the distance between known recorded occurrences of sensitive species and each study area.

The USFS Region 5 Special Status Species List was used to analyze the study areas located within USFS lands, and was reduced to include only the sensitive species previously observed within the respective National Forests. This information is also included in Table 2. This information was obtained from the District Botanists and Biologists with the Trabuco Ranger District of the Cleveland National Forest and the San Jacinto Ranger District of the San Bernardino National Forest. See Exhibit 6 for the locations of sites within USFS lands.

3.1.5 - USFWS Designated Critical Habitat

Certain study areas occur within the boundaries of current USFWS designated Critical Habitat for federally listed threatened or endangered species. MBA reviewed the location of all study areas with respect to the boundaries of all Critical Habitats in the vicinity of the study areas using ArcGIS software. See Exhibit 2 for the locations of these sites.

3.1.6 - Habitat Conservation Plan Areas

Some study areas are located within the boundaries of the WRMSHCP, the SKRHCP, or the CVMSHCP. These regional plans have specific requirements for development within their boundaries, depending on the location of the proposed developments. ArcGIS software was used to map the study areas with respect to relevant habitat conservation plan boundaries and their respective conservation areas (see Exhibits 3, 4, and 5 for the locations of these sites). The Riverside County Integrated Project (RCIP) Conservation Summary Report Generator and the CVAG Preliminary Conservation Report were also queried to determine potential habitat assessment and focused survey requirements for the study areas within the CVMSHCP and the WRMSHCP. See Appendix A for detailed information on the results of these database queries.

3.2 - Habitat Assessment

MBA biologists conducted a habitat assessment of all the study areas between April 2007 and May 2008. See Exhibit 1 and Table 1 for the locations of the study areas. The habitat assessments were conducted on foot during daylight hours. County employees and consultants escorted MBA biologists to study areas that were difficult to locate. The object of the assessments was not to search extensively for every species occurring within the study area, but to generally assess the site's biological resources and identify potentially suitable habitat areas for the sensitive plant and wildlife species identified as occurring in the vicinity of each site.

3.2.1 - Plant Communities

Plant communities were identified during the habitat assessments. The plant communities within the study areas were classified according to Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986) and cross-referenced with CDFG's List of California Vegetation Alliances (2007). Modifications were made by MBA's biologists where appropriate. The plant communities that occur within each study area are described in detail in the individual site descriptions included in Appendix A.

3.2.2 - Plant Species

Common plant species observed during the habitat assessment were identified by visual characteristics and morphology in the field and recorded in a field notebook. Uncommon and less familiar plants were identified offsite using taxonomical guides. A discussion of plant species observed within individual study areas is located in the individual site descriptions included in Appendix A. Taxonomic nomenclature used in this study follows Hickman (1993). Common plant names, when not available from Hickman (1993), were taken from other regionally specific references. For this report, all sensitive plant species with potential to occur within any study area are listed in Table 2. For discussions of plant species in this report and in Appendix A, scientific names are provided immediately following common names of plant species for the first reference only. Plant species observed during the habitat assessments are discussed in the individual site descriptions in Appendix A.

3.2.3 - Wildlife Species

Wildlife species detected during the habitat assessments by sight, calls, tracks, scat, or other signs were recorded in a field notebook. Notations were made regarding suitable habitat for those sensitive species determined to potentially occur within the study areas. Appropriate field guides were used to assist with species identification during surveys. Common wildlife names were obtained from the field guides listed in the References Section of this report. Within this report, all sensitive wildlife species with potential to occur on any study area are listed in Table 2. For discussions of wildlife species in this report and in Appendix A, scientific names are provided immediately following common names of plant species for the first reference only. Wildlife species observed during the habitat assessments, as well as species likely to occur, are discussed in the individual site descriptions in Appendix A.

3.2.4 - Nesting Birds

The study areas were assessed for their potential to support nesting birds protected under the MBTA and the CFG Code. The analysis was based on presence of suitable nesting habitat for tree, shrub, and ground nesting avian species. Discussion of each site for nesting bird habitat is provided in the individual site descriptions in Appendix A.

3.2.5 - California Desert Native Plants

MBA biologists recorded any observations of plant species protected under the CDNPA. All plant species observed within individual study areas are discussed in the individual site descriptions in Appendix A.

3.2.6 - Jurisdictional Waters and Wetlands

MBA biologists reviewed USGS topographic maps and aerial photography to identify any potential natural drainage features, including blue-line stream features present on USGS maps and linear patches of vegetation visible from aerial views. During the habitat assessments, MBA biologists recorded any riparian vegetation, wetland vegetation, bodies of water, bed/bank features, or other evidence of flows or ponding that could be considered potentially subject to state and federal regulatory authority as “waters of the U.S. and/or state.” The recorded observations are not intended for use as a formal delineation of waters of the U.S. or State but rather to identify areas that may require jurisdictional assessments and formal delineations upon the development of specific site plans. Information on the findings at each of the study areas are included in the individual site descriptions in Appendix A.

3.2.7 - Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by large expanses of rugged terrain, changes in vegetation, or significant human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat, separating different populations of a single species. Corridors effectively act as links between these populations.

Table 2: Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Chaparral sand-verbena	<i>Abronia villosa</i> var. <i>aurita</i>	None	None	1B.1	—	—	—	Sensitive
Cooper's hawk	<i>Accipiter cooperii</i>	None	None	—	Yes	Yes	—	Watch
Angel trumpets	<i>Acleisanthes longiflora</i>	None	None	2.3	—	—	—	—
Tricolored blackbird	<i>Agelaius tricolor</i>	None	None	—	Yes	Yes	—	Watch
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	None	None	—	Yes	Yes	—	Watch
Yucaipa onion	<i>Allium marvinii</i>	None	None	1B.1	—	Yes	—	Sensitive
Munz's onion	<i>Allium munzii</i>	Endangered	Threatened	1B.1	—	Yes	—	—
San Diego (dwarf burr) ambrosia	<i>Ambrosia pumila</i>	Endangered	None	1B.1	—	Yes	—	—
Bell's sage sparrow	<i>Amphispiza belli belli</i>	None	None	—	Yes	Yes	—	Watch
Silvery legless lizard	<i>Anniella pulchra pulchra</i>	None	None	—	Yes	—	—	Sensitive
Pallid bat	<i>Antrozous pallidus</i>	None	None	—	Yes	—	—	Sensitive
Golden eagle	<i>Aquila chrysaetos</i>	None	None	—	Yes	Yes	—	—
Peninsular manzanita	<i>Arctostaphylos peninsularis</i> ssp. <i>peninsularis</i>	None	None	2.3	—	—	—	—
Rainbow manzanita	<i>Arctostaphylos rainbowensis</i>	None	None	1B.1	—	Yes	—	Sensitive
Marsh sandwort	<i>Arenaria paludicola</i>	Endangered	Endangered	1B.1	—	—	—	—
Long-eared owl	<i>Asio otus</i>	None	None	—	Yes	—	—	Watch

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Orange-throated whiptail	<i>Aspidoscelis hyperythra</i>	None	None	—	Yes	Yes	—	Watch
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	Endangered	None	1B.1	—	—	—	—
Harwood's milk-vetch	<i>Astragalus insularis</i> var. <i>harwoodii</i>	None	None	2.2	—	—	—	—
Coachella Valley milk-vetch	<i>Astragalus lentiginosus</i> var. <i>coachellae</i>	Endangered	None	1B.2	—	—	Yes	—
Big Bear Valley woollypod	<i>Astragalus leucolobus</i>	None	None	1B.2	—	—	—	Watch
Jaeger's milk-vetch	<i>Astragalus pachypus</i> var. <i>jaegeri</i>	None	None	1B.1	—	Yes	—	Sensitive
Triple-ribbed milk-vetch	<i>Astragalus tricarinatus</i>	Endangered	None	1B.2	—	—	Yes	—
Burrowing owl	<i>Athene cunicularia</i>	None	None	—	Yes	Yes	Yes	Watch
San Jacinto Valley crownscale	<i>Atriplex coronata</i> var. <i>notatior</i>	Endangered	None	1B.1	—	Yes	—	—
South Coast saltscale	<i>Atriplex pacifica</i>	None	None	1B.2	—	—	—	—
Parish's brittlescale	<i>Atriplex parishii</i>	None	None	1B.1	—	Yes	—	Sensitive
Davidson's saltscale	<i>Atriplex serenana</i> var. <i>davidsonii</i>	None	None	1B.2	—	Yes	—	—
California ayenia	<i>Ayenia compacta</i>	None	None	2.3	—	—	—	—
Nevin's barberry	<i>Berberis nevinii</i>	Endangered	Endangered	1B.1	—	Yes	—	—
Red grama	<i>Bouteloua trifida</i>	None	None	2.3	—	—	—	—

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Threatened	None	—	—	Yes	—	—
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	Threatened	Endangered	1B.1	—	Yes	—	—
Orcutt's brodiaea	<i>Brodiaea orcuttii</i>	None	None	1B.1	—	Yes	—	Sensitive
Arroyo toad	<i>Bufo californicus</i>	Endangered	None	—	Yes	Yes	Yes	—
Ferruginous hawk	<i>Buteo regalis</i>	None	None	—	Yes	Yes	—	—
Round-leaved filaree	<i>California macrophylla</i>	None	None	1B.1	—	—	—	—
San Jacinto mariposa-lily	<i>Calochortus palmeri</i> var. <i>munzii</i>	None	None	1B.2	—	—	—	Sensitive
Palmer's mariposa-lily	<i>Calochortus palmeri</i> var. <i>palmeri</i>	None	None	1B.2	—	—	—	Sensitive
Plummer's mariposa-lily	<i>Calochortus plummerae</i>	None	None	1B.2	—	Yes	—	Sensitive
Intermediate mariposa-lily	<i>Calochortus weedii</i> var. <i>intermedius</i>	None	None	1B.2	—	Yes	—	Sensitive
Coastal cactus wren	<i>Campylorhynchus brunneicapillus sandiegensis</i>	None	None	—	Yes	Yes	—	—
Bristly sedge	<i>Carex comosa</i>	None	None	2.1	—	—	—	—
Santa Ana sucker	<i>Catostomus santaanae</i>	Threatened	None	—	Yes	Yes	—	—
Payson's jewel-flower	<i>Caulanthus simulans</i>	None	None	4.2	—	Yes	—	Sensitive
Lakeside ceanothus	<i>Ceanothus cyaneus</i>	None	None	1B.2	—	—	—	Sensitive

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	None	None	1B.1	—	Yes	—	—
Parish's chaenactis	<i>Chaenactis parishii</i>	None	None	1B.3	—	—	—	Watch
Dulzura pocket mouse	<i>Chaetodipus californicus femoralis</i>	None	None	—	Yes	—	—	—
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	None	None	—	Yes	Yes	—	Watch
Pallid San Diego pocket mouse	<i>Chaetodipus fallax pallidus</i>	None	None	—	Yes	—	—	—
Abrams' spurge	<i>Chamaesyce abramsiana</i>	None	None	2.2	—	—	—	—
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	Threatened	None	—	Yes	—	—	—
Parry's spineflower	<i>Chorizanthe parryi</i> var. <i>parryi</i>	None	None	3.2	—	Yes	—	Sensitive
Long-spined spineflower	<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	None	None	1B.2	—	Yes	—	Sensitive
White-bracted spineflower	<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	None	None	1B.2	—	—	—	Watch
Northern harrier	<i>Circus cyaneus</i>	None	None	—	Yes	Yes	—	Watch
California saw-grass	<i>Cladium californicum</i>	None	None	2.2	—	—	—	—
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	Candidate	Endangered	—	—	Yes	—	Sensitive
Gilded flicker	<i>Colaptes chrysoides</i>	None	Endangered	—	—	—	—	—

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Las Animas colubrina	<i>Colubrina californica</i>	None	None	2.3	—	—	—	—
Summer holly	<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	None	None	1B.2	—	—	—	—
Salt marsh bird's-beak	<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>	Endangered	Endangered	1B.2	—	—	—	—
Foxtail cactus	<i>Coryphantha alversonii</i>	None	None	4.3	—	—	—	—
Northern red-diamond rattlesnake	<i>Crotalus ruber ruber</i>	None	None	—	Yes	Yes	—	Watch
Tecate cypress	<i>Cupressus forbesii</i>	None	None	1B.1	—	—	—	Sensitive
Desert pupfish	<i>Cyprinodon macularius</i>	Endangered	Endangered	—	—	—	Yes	—
Mojave tarplant	<i>Deinandra mohavensis</i>	None	Endangered	1B.3	—	Yes	—	Sensitive
Cuyamaca larkspur	<i>Delphinium hesperium</i> ssp. <i>cuyamacae</i>	None	Rare	1B.2	—	—	—	Sensitive
Yellow warbler	<i>Dendroica petechia brewsteri</i>	None	None	—	Yes	Yes	Yes	Watch
Sonoran yellow warbler	<i>Dendroica petechia sonorana</i>	None	None	—	Yes	—	—	—
Ziegler's aster	<i>Dieteria canescens</i> var. <i>ziegleri</i>	None	None	1B.2	—	—	—	Sensitive
Casey's June beetle	<i>Dinacoma caseyi</i>	Candidate	None	—	—	—	—	—
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	Endangered	None	—	Yes	—	—	—
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	Endangered	Threatened	—	—	Yes	—	—

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Glandular ditaxis	<i>Ditaxis claryana</i>	None	None	2.2	—	—	—	—
California ditaxis	<i>Ditaxis serrata</i> var. <i>californica</i>	None	None	3.2	—	—	—	—
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	Endangered	Endangered	1B.1	—	Yes	—	—
Southern California rock draba	<i>Draba corrugata</i> var. <i>saxosa</i>	None	None	1B.3	—	—	—	Sensitive
Santa Monica dudleya (oval-leaved dudleya)	<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Threatened	None	1B.2	—	—	—	—
Many-stemmed dudleya	<i>Dudleya multicaulis</i>	None	None	1B.2	—	Yes	—	Sensitive
Sticky dudleya	<i>Dudleya viscida</i>	None	None	1B.2	—	Yes	—	Sensitive
Southwestern willow flycatcher	<i>Empidonax traillii eximus</i>	Endangered	Endangered	—	—	Yes	Yes	—
California horned lark	<i>Eremophila alpestris actia</i>	None	None	—	Yes	Yes	—	Watch
Santa Ana River woollystar	<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Endangered	Endangered	1B.1	—	Yes	—	—
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	Endangered	Endangered	1B.1	—	Yes	—	—
Spotted bat	<i>Euderma maculatum</i>	None	None	—	Yes	—	—	Watch
Coronado skink	<i>Eumeces skiltonianus interparietalis</i>	None	None	—	Yes	—	—	Watch
Western mastiff bat	<i>Eumops perotis californicus</i>	None	None	—	Yes	—	—	Watch
Cliff spurge	<i>Euphorbia misera</i>	None	None	2.2	—	—	—	—

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	Endangered	None	—	—	Yes	—	—
San Jacinto Mountains bedstraw	<i>Galium angustifolium</i> ssp. <i>jacinticum</i>	None	None	1B.3	—	Yes	—	Sensitive
California bedstraw	<i>Galium californicum</i> ssp. <i>primum</i>	None	None	1B.2	—	Yes	—	Sensitive
Campbell's liverwort	<i>Geothallus tuberosus</i>	None	None	1B.1	—	—	—	—
Arroyo chub	<i>Gila orcuttii</i>	None	None	—	Yes	Yes	—	Sensitive
Desert tortoise	<i>Gopherus agassizii</i>	Threatened	Threatened	—	—	—	Yes	—
Parish club-cholla	<i>Grusonia parishii</i>	None	None	2.3	—	—	—	—
Bald eagle	<i>Haliaeetus leucocephalus</i>	Delisted	Endangered	—	—	Yes	—	—
Los Angeles sunflower	<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	None	None	1A	—	—	—	Sensitive
Shaggy-haired alumroot	<i>Heuchera hirsutissima</i>	None	None	1B.3	—	—	—	Sensitive
Mesa horkelia	<i>Horkelia cuneata</i> ssp. <i>puberula</i>	None	None	1B.1	—	—	—	Sensitive
Ramona horkelia	<i>Horkelia truncata</i>	None	None	1B.3	—	—	—	Sensitive
Yellow-breasted chat	<i>Icteria virens</i>	None	None	—	Yes	Yes	Yes	Watch
California satintail	<i>Imperata brevifolia</i>	None	None	2.1	—	—	—	—
Loggerhead shrike	<i>Lanius ludovicianus</i>	None	None	—	Yes	Yes	—	Watch
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	None	None	1B.1	—	Yes	—	—

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Heart-leaved pitcher sage	<i>Lepechinia cardiophylla</i>	None	None	1B.2	—	Yes	—	Sensitive
Robinson's pepper-grass	<i>Lepidium virginicum</i> var. <i>robinsonii</i>	None	None	1B.2	—	—	—	Watch
Santa Rosa Mountains leptosiphon	<i>Leptosiphon floribundus</i> ssp. <i>hallii</i>	None	None	1B.3	—	—	—	Sensitive
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	None	None	—	Yes	Yes	—	Watch
Lemon lily	<i>Lilium parryi</i>	None	None	1B.2	—	Yes	—	Sensitive
Parish's meadowfoam	<i>Limnanthes gracilis</i> ssp. <i>parishii</i>	None	Endangered	1B.2	—	Yes	—	Sensitive
Little San Bernardino Mountains linanthus	<i>Linanthus maculatus</i>	None	None	1B.2	—	—	Yes	Watch
Parish's desert-thorn	<i>Lycium parishii</i>	None	None	2.3	—	—	—	—
California leaf-nosed bat	<i>Macrotus californicus</i>	None	None	—	Yes	—	—	Sensitive
California marina	<i>Marina orcuttii</i> var. <i>orcuttii</i>	None	None	1B.3	—	—	—	Sensitive
Spearleaf	<i>Matelea parvifolia</i>	None	None	2.3	—	—	—	—
Gila woodpecker	<i>Melanerpes uropygialis</i>	None	Endangered	—	—	—	—	—
Elf owl	<i>Micrathene whitneyi</i>	None	Endangered	—	—	—	—	—
Felt-leaved monardella	<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	None	None	1B.2	—	—	—	—

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Hall's monardella	<i>Monardella macrantha</i> ssp. <i>hallii</i>	None	None	1B.3	—	Yes	—	Sensitive
Brown-crested flycatcher	<i>Myiarchus tyrannulus</i>	None	None	—	Yes	—	—	Sensitive
Little mouse-tail	<i>Myosurus minimus apus</i>	None	None	3.1	—	Yes	—	—
Arizona Myotis	<i>Myotis occultus</i>	None	None	—	—	—	—	—
Cave myotis	<i>Myotis velifer</i>	None	None	—	Yes	—	—	—
Gambel's water cress	<i>Nasturtium gambelii</i>	Endangered	Threatened	1B.1	—	—	—	—
Spreading navarretia	<i>Navarretia fossalis</i>	Threatened	None	1B.1	—	Yes	—	—
Prostrate navarretia	<i>Navarretia prostrata</i>	None	None	1B.1	—	Yes	—	—
Slender woolly-heads	<i>Nemacaulis denudata</i> var. <i>gracilis</i>	None	None	2.2	—	—	—	—
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	None	None	—	Yes	Yes	—	Watch
Chaparral nolina	<i>Nolina cismontana</i>	None	None	1B.2	—	—	—	Sensitive
Pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	None	None	—	Yes	—	—	Watch
Southern grasshopper mouse	<i>Onychomys torridus ramona</i>	None	None	—	Yes	—	—	Watch
California orcutt grass	<i>Orcuttia californica</i>	Endangered	Endangered	1B.1	—	Yes	—	—
Peninsular bighorn	<i>Ovis canadensis nelsoni</i> DPS	Endangered	Threatened	—	—	—	Yes	—
Gander's ragwort	<i>Packera ganderi</i>	None	Rare	1B.2	—	—	—	—

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
California beardtongue	<i>Penstemon californicus</i>	None	None	1B.2	—	Yes	—	Sensitive
Palm Springs pocket mouse	<i>Perognathus longimembris bangsi</i>	None	None	—	Yes	—	Yes	—
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	None	None	—	Yes	Yes	—	Sensitive
Brand's phacelia	<i>Phacelia stellaris</i>	Candidate	None	1B.1	—	Yes	—	—
Santiago Peak phacelia	<i>Phacelia suaveolens</i> ssp. <i>keckii</i>	None	None	1B.3	—	—	—	Sensitive
San Diego (coast) horned lizard	<i>Phrynosoma coronatum</i> (blainvillii population)	None	None	—	Yes	Yes	—	Sensitive
Flat-tailed horned lizard	<i>Phrynosoma mcallii</i>	None	None	—	Yes	—	Yes	—
Summer tanager	<i>Piranga rubra</i>	None	None	—	Yes	—	Yes	Watch
White-faced ibis	<i>Plegadis chihi</i>	None	None	—	Yes	Yes	—	Watch
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	Threatened	None	—	Yes	Yes	—	—
Thorny milkwort	<i>Polygala acanthoclada</i>	None	None	2.3	—	—	—	—
White rabbit-tobacco	<i>Pseudognaphalium leucocephalum</i>	None	None	2.2	—	—	—	—
Laguna Mountain skipper	<i>Pyrgus ruralis lagunae</i>	Endangered	None	—	—	—	—	—
Vermilion flycatcher	<i>Pyrocephalus rubinus</i>	None	None	—	Yes	—	—	—
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	Endangered	Threatened	—	—	—	Yes	—

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
California red-legged frog	<i>Rana aurora draytonii</i>	Threatened	None	—	Yes	Yes	—	—
Sierra Madre yellow-legged frog	<i>Rana muscosa</i>	Endangered	None	—	—	Yes	—	—
Delhi Sands flower-loving fly	<i>Rhaphiomidas terminatus abdominalis</i>	Endangered	None	—	—	Yes	—	—
Santa Ana speckled dace	<i>Rhinichthys osculus</i> ssp. 3	None	None	—	Yes	—	—	Sensitive
Black skimmer	<i>Rynchops niger</i>	None	None	—	Yes	—	—	—
Latimer's woodland-gilia	<i>Saltugilia latimeri</i>	None	None	1B.2	—	—	—	—
Coast patch-nosed snake	<i>Salvadora hexalepis virgultea</i>	None	None	—	Yes	—	—	Watch
Orocoxia sage	<i>Salvia greatae</i>	None	None	1B.3	—	—	Yes	—
San Miguel savory	<i>Satureja chandleri</i>	None	None	1B.2	—	Yes	—	Sensitive
Couch's spadefoot	<i>Scaphiopus couchii</i>	None	None	—	Yes	—	—	—
Shevock's copper moss	<i>Schizymerium shevockii</i>	None	None	1B.2	—	—	—	—
Chaparral ragwort	<i>Senecio aphanactis</i>	None	None	2.2	—	—	—	—
Coves' cassia	<i>Senna covesii</i>	None	None	2.2	—	—	—	—
Hammitt's clay-cress	<i>Sibaropsis hammittii</i>	None	None	1B.2	—	Yes	—	Sensitive
Salt Spring checkerbloom	<i>Sidalcea neomexicana</i>	None	None	2.2	—	—	—	—
White-margined oxytheca	<i>Sidotheca emarginata</i>	None	None	1B.3	—	—	—	Sensitive

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Colorado River cotton rat	<i>Sigmodon arizonae plenus</i>	None	None	—	Yes	—	—	—
Western spadefoot	<i>Spea hammondi</i>	None	None	—	Yes	—	—	Watch
Palm Springs round-tailed ground squirrel	<i>Spermophilus tereticaudus chlorus</i>	Candidate	None	—	Yes	—	Yes	—
Coachella Valley Jerusalem cricket	<i>Stenopelmatus cahuilensis</i>	Concern	none	—	—	—	Yes	—
Southern jewel-flower	<i>Streptanthus campestris</i>	None	None	1B.3	—	—	—	Sensitive
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	Endangered	None	—	—	Yes	—	—
San Bernardino aster	<i>Symphotrichum defoliatum</i>	None	None	1B.2	—	—	—	Sensitive
Coast Range newt	<i>Taricha torosa torosa</i>	None	None	—	Yes	Yes	—	—
American badger	<i>Taxidea taxus</i>	None	None	—	Yes	—	—	Watch
Parry's tetracoccus	<i>Tetracoccus dioicus</i>	None	None	1B.2	—	—	—	Sensitive
Two-striped garter snake	<i>Thamnophis hammondi</i>	None	None	—	Yes	—	—	Sensitive
California screw moss	<i>Tortula californica</i>	None	None	1B.2	—	—	—	—
Bendire's thrasher	<i>Toxostoma bendirei</i>	None	None	—	Yes	—	—	Watch
Crissal thrasher	<i>Toxostoma crissale</i>	None	None	—	Yes	—	Yes	Watch
Le Conte's thrasher	<i>Toxostoma lecontei</i>	None	None	—	Yes	—	Yes	—
Wright's trichocoronis	<i>Trichocoronis wrightii wrightii</i>	None	None	2.1	—	Yes	—	—

Table 2 (Cont.): Endangered, Threatened, and Special Status Species

Common Name	Scientific Name	Federal Status	State Status	CNPS Listing	California Species of Special Concern	WR MSHCP covered species	CV MSHCP covered species	USFS Sensitive and Watch List Species
Coachella Valley fringe-toed lizard	<i>Uma inornata</i>	Threatened	Endangered	—	—	—	Yes	—
Mojave fringe-toed lizard	<i>Uma scoparia</i>	None	None	—	Yes	—	—	—
La Purisima viguiera	<i>Viguiera purisimae</i>	None	None	2.3	—	—	—	—
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Endangered	Endangered	—	—	Yes	Yes	—
Mecca-aster	<i>Xylorhiza cognate</i>	None	None	1B.2	—	—	Yes	—
Razorback sucker	<i>Xyrauchen texanus</i>	Endangered	Endangered	—	—	—	—	—
CNPS = California Native Plant Society WRMSHCP = Western Riverside County Multiple Species Habitat Conservation Plan CVMSHCP = Coachella Valley Multiple Species Habitat Conservation Plan USFS = United States Forest Service								

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The focus of this analysis was to determine if development of the various tower sites would alter the current land use and have significant impacts on the regional movement of wildlife. These conclusions are based on the information compiled from the literature review, including aerial photographs, USGS topographic maps, resource maps for the vicinity, the field survey, and knowledge of desired topography and resource requirements for wildlife potentially utilizing the study areas and local vicinities. Due to the limited size, dispersed locations, and minimal sustained disturbance associated with each of the tower sites, it was generally concluded that wildlife corridors would not be affected by the development of any study area. However, this issue was addressed separately for each site and those assessments are included in the individual site descriptions in Appendix A.

3.3 - Problems and Limitations

The habitat assessments were conducted during varying times of the year, with the majority in the summer and winter seasons. As a result, many annual plants were withered and/or dead, few new annuals had germinated, and some perennial species were dormant, making identifications problematic.

Many amphibians, reptiles, and mammals are secretive by nature and some are nocturnally active, making diurnal observations problematic. Additionally, most species are less active during the hot summer and cold winter days. Observations of diagnostic sign may provide evidence of occurrence of these species. Otherwise, conclusions regarding potential occurrence are based on consideration of habitat suitability factors.

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SECTION 4: EXISTING CONDITIONS

A habitat assessment was conducted separately for each study area. The surveys were conducted by MBA biologist Steve Norton, except for the Avocado Flats, Margarita (SDSU), and Redondo Mesa study areas, which were conducted by MBA biologist James Hickman. A summary of the weather conditions during the survey is located in Table 3. A detailed discussion of the existing conditions for each study area resulting from the habitat assessments and literature review are in Appendix A. Site photographs, aerial photographs, and USDA soil maps are also included in Appendix A for each study area.

Table 3: Survey Conditions Summary

Location Name	Altitude (feet above sea level)	Habitat Assessment Date	Temperature (F)	Cloud Cover	Wind Speed (MPH)
Arlington	746	4-Jun-2007	71	Clear	Calm
Avocado Flats	1,426	16-Aug-2007	84	Clear	1-3
Big Maria	650	27-Jun-2007	94	Clear	2
Black Eagle	1,668	14-Jan-2008	58	Clear	3-5
Black Jack	980	26-Jun-2007	108	Clear	5-13
Blue Mountain	2,428	10-Apr-2007	71	Clear	6-10
Box Springs	3,080	10-Apr-2007	57	Overcast	1-2
Brookside	2,584	18-Dec-2007	55	Overcast	1-3
Cajalco	1,215	10-Apr-2007	78	Clear	9
Corn Springs	723	26-Jun-2007	99	Clear	0-3
Corona	661	28-Aug-2007	93	Clear	3
El Cariso	3,070	13-Dec-2007	51	Clear	1-4
Elsinore Peak	3,557	13-Dec-2007	44	Clear	3-5
Estelle Mountain (A)	2,220	17-May-2008	80	Clear	Calm
Estelle Mountain (B)	2,280	17-May-2008	80	Clear	Calm
Glen Avon	2,445	3-Apr-2008	71	Partly Cloudy	16
Green River	700	28-Aug-2007	92	Clear	Calm
Homeland	1,594	21-Aug-2007	99	Clear	Calm
Iron Mountain	1,920	14-Jan-2008	56	Clear	14-24
Joshua Tree	4,893	9-Aug-2007	79	Clear	3-8
Lake Elsinore	1,558	11-Dec-2007	58	Clear	7-11
Lake Mathews	1,494	27-Aug-2007	84	Clear	1-8
Lake Riverside	3,693	11-Dec-2007	47	Partly Cloudy	7

Table 3 (Cont.): Survey Conditions Summary

Location Name	Altitude (feet above sea level)	Habitat Assessment Date	Temperature (F)	Cloud Cover	Wind Speed (MPH)
Leona	2,262	11-Dec-2007	49	Mostly Cloudy	3-5
Line	-199	19-Jul-2007	88	Clear	0-5
Margarita (MWD)	1,070	3-Apr-2008	55	Overcast	Calm
Margarita (SDSU)	1,600	16-Aug-2007	86	Clear	Calm
Marshel	2,309	23-Aug-2007	89	Clear	8-12
Mead Valley	1,670	21-Aug-2007	99	Clear	Calm
Mecca Landfill	45	4-Apr-2008	86	Partly Cloudy	5-7
Menifee	1,651	23-Aug-2007	89	Clear	8-12
Morongo	1,725	18-Dec-2007	63	Partly Cloudy	7-17
Paradise	1,383	28-Aug-2007	76	Clear	1
Quail Valley	1,609	11-Dec-2007	54	Clear	17-21
Rancho Carrillo	2,490	3-Apr-2007	50	Overcast	4
Ranger Peak	5,043	19-Jun-2007	78	Clear	9
Red Mountain	4,507	19-Jun-2007	74	Clear	3
Redonda Mesa	2,784	16-Aug-2007	92	Clear	1-3
Rice	916	28-Jun-2007	96	Clear	10
Road 177	603	26-Jun-2007	97	Clear	Calm
Santa Rosa Peak	7,494	16-May-2008	68	Clear	10
Santiago Peak	5,601	13-Dec-2007	60	Clear	2-3
Spring Hill	2,605	4-Apr-2008	71	Partly Cloudy	9-14
Sunnyslope	1,094	18-Dec-2007	55	Overcast	Calm
Temescal	1,064	13-Dec-2007	56	Partly Cloudy	0-2
Timoteo	2,300	18-Dec-2007	53	Overcast	1-2
Vaquero	1,955	11-Dec-2007	60	Partly Cloudy	3-9
Vidal Junction	941	27-Jun-2007	89	Clear	3-6
Whitewater	1,726	19-Jul-2007	100	Clear	6-17
Wiley Well	391	26-Jun-2007	108	Clear	4-9
Winchester	2,031	21-Aug-2007	93	Clear	2-5

SECTION 5: BIOLOGICAL RESOURCES SUMMARY

Each study area was assessed for its potential to support sensitive biological resources. Since this assessment covers more than 50 individual sites, the main body of this habitat assessment presents only a summary of the findings for each site. That summary is contained below and also in Table 14 at the end of this section. Detailed information for each site regarding existing conditions, sensitive biological resources, applicable management plans, and other information is contained in Appendix A of this document. Readers desiring detailed information about a particular site or those who are interested in how the assessment arrived at the conclusions presented here are directed to the individual site descriptions in Appendix A.

5.1 - Summary of Findings

5.1.1 - U.S. Fish and Wildlife Service Designated Critical Habitat

The PSEC project proposes several sites that are located within designated Critical Habitat (requires a Section 7 Consultation by FCC) but not within the boundaries of an approved MSHCP. Only a Section 7 Consultation will be required. Table 4 identifies these sites and indicates the species in whose habitat the sites are proposed. Exhibit 2 shows the locations of these sites.

Table 4: Sites in Critical Habitat and Not Within an MSHCP

Site Name	Species Name
Blue Mountain	Coastal California Gnatcatcher
Corn Springs	Desert Tortoise
Elsinore Peak	Munz's Onion
Estelle Mountain (A)	Quino Checkerspot Butterfly
Estelle Mountain (B)	Quino Checkerspot Butterfly
Spring Hill	Desert Tortoise
Vidal Junction	Desert Tortoise
Wileys Well	Desert Tortoise

For the sites listed above that are not located upon federal lands, the FCC will be required to consult with the USFWS on potential impacts to species and habitat before issuing a permit. For sites located on federal lands, the appropriate federal land management agency (BLM or USFS) will need to initiate consultation. As part of this process, a biological assessment will need to be prepared and submitted to the USFWS that describes the project, the likely impacts (if any) to the listed species and avoidance, minimization, and mitigation measures to offset an identified impact. If suitable habitat is present, part of the biological assessment process will involve conducting focused surveys to determine if the site is occupied by the listed species. However, given the small size and low level of

impact of the project sites, it is assumed that for this project, formal consultation may not be required and that informal consultation may be sufficient. Such consultation includes phone contacts, meetings, conversations, letters, project modifications and concurrences that occur prior to the USFWS’s determination that formal consultation is not necessary. Once this determination has been made and the USFWS has concurred that the project will not negatively affect a listed species, a “not likely to adversely affect” concurrence may be issued by the USFWS and the project may proceed.

5.1.2 - State- and Federally-Listed Endangered and Threatened Species

The PSEC project proposes to develop several sites outside of approved MSHCP areas and Critical Habitat areas, but some of these sites are located in natural areas that may potentially impact State or federally protected species. To ensure no “take” will occur, focused surveys will need to be conducted for those sites. Table 5 identifies these sites and indicates the legally protected species that may not be impacted. Additionally, several sites are adjacent to potentially sensitive habitat. The sites themselves do not contain suitable habitat for listed species, but are in close enough proximity to suitable habitat to warrant the implementation of avoidance measures to avoid inadvertent take during construction. This site will not require focused surveys, but will instead require pre-construction surveys to determine the presence or absence of the species and whether or not the area should be avoided until it can be determined that the species is no longer in the area. Those sites are also listed in Table 5.

Table 5: Sites with Potential for Take Outside an MSHCP or Critical Habitat

Site Name	Species Name	Action
Avocado Flats	Coastal California Gnatcatcher	Avoidance Only
Black Jack	Desert Tortoise	Focused Surveys
Rice	Desert Tortoise	Focused Surveys
Road 177	Desert Tortoise	Focused Surveys

5.1.3 - California Species of Special Concern (CSC)

Since the project encompasses vast areas of Riverside County and small portions of adjacent counties, there are a large number of CSC species that have a moderate to high potential to occur. Examples include the burrowing owl, a CSC that is also protected by the MBTA and CDFG Code. Other avian CSC species that are protected by the MBTA and CDFG Code include the Bell’s sage sparrow, Southern California rufous-crowned sparrow, California horned lark, Crissal thrasher, Le Conte's thrasher, and raptors such as Cooper’s hawk, and northern harrier. Due to the limited size of suitable habitat for these species at each site, potential impacts can be considered adverse but less than significant on a local or regional basis. In addition, impacts to many of the species are addressed by the WRMSHCP and CVMSHCP and each species is covered and considered adequately conserved.

The project sites also contain suitable habitat for several reptile and mammal species of special concern, including coast (San Diego) horned lizard, northern red-diamond rattlesnake, orange-throated whiptail, northwestern San Diego pocket mouse, pallid San Diego pocket mouse, San Diego black-tailed jackrabbit, and San Diego desert woodrat. Although each of these species are CSC species, none are federally or state-listed as endangered or threatened. In addition, potential impacts to these species are covered with adherence to the requirements of the appropriate MSHCP and payment of the appropriate mitigation fee. Therefore, with payment of the fee and compliance with the terms of the appropriate MSHCP, no further action regarding these sensitive wildlife species is required.

5.1.4 - Western Riverside County Multiple Species Conservation Plan (WRMSHCP)

Approximately half of the PSEC project sites are proposed to be located within the boundaries of the WRMSHCP and are covered by the plan. None of these sites are located on federal lands. All sites have had a habitat assessment completed and many have been determined to be consistent with the requirements without any further documentation. Table 6 identifies these sites, list survey requirements, and indicates whether or not the sites are within a Criteria Cell or conservation area. Exhibit 3 shows the locations of these sites.

Table 6: Sites within the WRMSHCP

Site Name	Located within a Criteria Cell or Conservation Area?	Focused Survey Requirements*
Arlington	No	No
Box Springs	Yes	No
Brookside	No	No
Cajalco	Yes	San Diego Ambrosia, Brand’s Phacelia, San Miguel Savory
Corona	No	No
Glen Avon	Yes	San Miguel Savory
Green River	Yes	Braunton’s Milk-Vetch, Burrowing Owl, San Miguel Savory
Homeland	No	No
Lake Elsinore	No	No
Lake Mathews	No	Burrowing Owl, Stephens’ Kangaroo Rat, San Miguel Savory
Lake Riverside	Yes	No
Leona	Yes	Burrowing Owl
Margarita (MWD)	Yes	No
Margarita (SDSU)	No	No

Table 6 (Cont.): Sites within the WRMSHCP

Site Name	Located within a Criteria Cell or Conservation Area?	Focused Survey Requirements*
Marshell	No	San Miguel Savory
Mead Valley	No	No
Menifee	No	No
Paradise	No	No
Quail Valley	No	No
Redondo Mesa	Yes	
Sunnyslope	No	San Diego Ambrosia, Brand’s Phacelia, San Miguel Savory
Temescal	Yes	San Diego Ambrosia, San Miguel Savory
Timoteo	Yes	No
Vaquero	No	No
Winchester	No	San Diego Ambrosia
* Focused surveys are not required if the general habitat assessment of the area indicates that suitable habitat for a species is not present on the site. For more information on specific habitat attributes at each site, see the individual site descriptions in Appendix A.		

As stated earlier, those sites that are within a Criteria Cell must have a HANS application submitted before development can proceed. Sites that have been identified as having potentially suitable habitat for identified sensitive species must conduct focused surveys and submit the result to the County to document the presence or absence of the species. The HANS application and focused survey results are reviewed by the RCA to determine the project’s consistency with the WRMSHCP.

5.1.5 - Western Riverside County Habitat Conservation Plan for Stephens’ Kangaroo Rat (SKRHCP)

In addition to the fee requirement for projects developed within SKRHCP Fee Area, several reserve areas have been established that are intended to conserve suitable habitat for the species. Proposed projects that occur within a reserve are required to conduct focused surveys for the species and undergo review by the Riverside County Habitat Conservation Agency. Table 7 identifies the PSEC sites that are within a reserve area and those sites that will require focused surveys. Exhibit 4 shows the locations of these sites.

Table 7: Sites within the SKRHCP Fee Area and Preserve Areas

Site Name	Located within a SKR Reserve Area?	Focused Survey Requirements for SKR
Arlington	No	No
Box Springs	No	No
Cajalco	No	No
Homeland	No	No
Lake Elsinore	No	No
Lake Mathews	Yes	Yes
Leona	No	No
Margarita (MWD)	No	No
Margarita (SDSU)	No	No
Marshell	No	No
Mead Valley	No	No
Menifee	No	No
Quail Valley	No	No
Timoteo	No	No
Winchester	No	No

5.1.6 - Coachella Valley Multiple Species Conservation Plan (CVMSHCP)

The PSEC project proposes five sites that are located within the boundaries of the CVMSHCP that are not located on federal lands. Table 8 identifies these sites and indicates whether or not the sites are within a conservation area. Since the plan has not yet been fully adopted, it is unclear exactly what specific requirements must be met for projects within conservation areas. Interim guidance suggests that consultation between the County and the USFWS, CDFG, and CVAG will be required on sites that have proposed development inside proposed conservation areas. The exact measures required to comply are not known and presumably will vary dependant on the conservation area, the species to be impacted and the size of the disturbance. Exhibit 5 shows the locations of these sites.

Table 8: Sites within the CVMSHCP

Site Name	Located Within a Conservation Area
Line	No
Mecca Landfill	No
Morongo	No
Santa Rosa Peak	No
Whitewater	Yes

5.1.7 - California Desert Native Plants Act (CDNPA)

Table 9 lists all of the sites that have CDNPA listed plants on the project site. Avoidance is the best method to eliminate impacts to these plants, but if avoidance is not feasible then an appropriate permit will need to be obtained and removal will need to occur under the parameters prescribed in the CDNPA.

Table 9: Sites with CDNPA Listed Plants Onsite

Site Name	CDNPA Plant Species	Applicable CDNPA Section
Black Jack	Catclaw Acacia	80073
Corn Springs	Desert Ironwood	80073
Lake Riverside	Mojave Yucca, Beavertail Cactus	80073
Leona	Snake Cholla	80073
Morongo	Snake Cholla, Barrel Cactus	80072 and 80073
Red Mountain	Chaparral Yucca	80073
Rice	Beavertail Cactus	80073
Santiago Peak	Chaparral Yucca	80073
Spring Hill	Jumping Cholla, Ocotillo	80073
Sunnyslope	Snake Cholla	80073
Timoteo	Chaparral Yucca	80073

5.1.8 - California Native Plant Society (CNPS)

CNPS plants have the potential to occur in many of the project sites. The objective of the CNPS listing is informational and guidelines for avoidance, reduction of impacts, or specific mitigation are available and should be taken into consideration. Much like with CSC species, the limited size of impact at each of the proposed sites and compliance with the WRMSHCP and CVMSHCP (as applicable) would be sufficient to find that impacts to these species would be negligible.

5.1.9 - Nesting and Migratory Birds

During the habitat assessment for each site, those sites with and without suitable habitat were identified. Sites without suitable habitat included areas that were paved or completely devoid of adequate vegetation, burrows, or other cover that could serve as habitat for nesting birds. Table 10 identifies those sites that were determined not to contain suitable habitat.

Table 10: Sites without Suitable Nesting Bird Habitat

Site Name
Arlington
Big Maria
Black Eagle
Blue Mountain
Brookside
Corona
Iron Mountain
Joshua Tree
Mead Valley
Menifee

All other PSEC sites except those listed above will be required to be constructed outside of nesting season or, if construction must take place during nesting season, they must undergo preconstruction surveys to determine if nesting birds are present. Avoidance is the only method available to eliminate impacts to nesting birds, and if nesting birds are found during the surveys, construction will not be allowed to commence in those areas until the nests have completed their cycle. If nesting birds are not found, then construction may commence without impediment.

Reasonable evidence is available that suggests that towers that are supported by guy-wires can result in high levels of avian mortality from birds colliding with the guy-wires (Manville, 2000). Additional evidence suggests that towers that are fitted with aircraft avoidance lighting can attract birds and also result in heightened levels of avian mortality when birds collide with tower structures. At the current time, one PSEC site (the Line site on the eastern side of the Salton Sea) is proposed to be constructed using guy-lines for support. Several other sites are proposed that due to their height or other considerations will be required by the Federal Aviation Administration (FAA) to be fitted with aircraft avoidance lighting.

To avoid impacts to birds, towers that utilize guy-wires should be avoided to the greatest extent feasible. However, it is recognized that site constraints or other factors may render the use of guy-wire supported towers as the only practical alternative at some locations. In these instances, impacts to birds resulting from guy-wires can be minimized by limiting the number of guy-wires by installing only the number of guy-lines that are necessary to meet the engineering requirements of the structure. Some guy-line towers are “over-engineered” and are equipped with numerous redundant wires that can add significantly to avian mortality. Therefore, the installation of overly-redundant wires should be avoided. Guy-wires that must be installed can be equipped with visual markers (e.g., bird diverter devices) that can serve to make the wires more visible to birds and thus lessen the potential for

collisions. The installation of these devices is recommended for any tower that will utilize guy-wires for support.

Aircraft avoidance lighting will be required at some sites as per FAA requirements. However, these lighting devices can be installed in such a manner as to minimize their attraction to birds and thus avoid undue impacts to birds. Lights can be up-shielded and their intensity lessened to minimum required levels. In addition, the number of flashes per minute (i.e., the amount of time between flashes) can be lessened. These measures have been shown to lessen the light’s attractiveness to birds. Other evidence suggests that birds are less attracted to white strobe lights rather than solid red or pulsating red warning lights. Therefore, the installation of lighting consistent with these findings is recommended. The USFWS has published interim guidance on these matters and the suggestions contained therein should be followed to the extent feasible.

5.1.10 - Jurisdictional Waters and Wetlands

During the habitat assessment for each site, each area was reviewed for the presence of potential jurisdictional waters that could be impacted by the proposed project. Those sites where potential impacts were identified are listed below in Table 11.

Table 11: Sites with Potential to Impact Jurisdictional Areas

Site Name
Brookside
Corn Springs
El Cariso
Line
Margarita (MWD)
Vidal Junction
Wileys Well

It is important to note that none of the potential jurisdictional features identified at any of the sites are located within the proposed footprint of any project site. Rather, these features are instead located outside of the project footprints. Therefore, none of these areas will be directly impacted (i.e., destruction or modification of a drainage). The potential impacts to these areas would likely be indirect only, such as impacts that could arise during construction if flows from within the project footprint were to carry sediment into these potentially jurisdictional areas.

As per existing regulations, the project will be required to obtain a General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ) from the RWQCB. Issuance of the permit requires the development and implementation of a SWPPP that

lists BMPs that will be implemented to protect storm water runoff from impacting jurisdictional features. BMPs include the use of straw bales or other temporary detention devices designed to control offsite flows. Therefore, implementation of the conditions contained in the permit should be satisfactory to minimize impacts to jurisdictional features.

5.1.11 - National Forest Land Management Plans

The PSEC project proposes six sites that are located within the boundaries of the CNF and SBNF. Table 12 identifies these sites and Exhibit 6 shows the locations of these planning areas.

Table 12: Sites within the CNF and SBNF

Site Name	National Forest
El Cariso	CNF
Elsinore Peak	CNF
Rancho Carrillo	CNF
Ranger Peak	SBNF
Red Mountain	SBNF
Santiago Peak	CNF

Sites located on national forest lands will be expected to submit an analysis of the project impacts for review by the respective national forest before use authorization can be granted. These sites will also be required to undergo separate analysis under NEPA to evaluate all their potential environmental impacts. Sites located on national forest lands are not subject to either the WRMSHCP or the CVMSHCP.

5.1.12 - Bureau of Land Management Resource Management Plans

The PSEC project proposes 11 sites on lands managed by the BLM. Table 13 identifies these sites and their applicable resource management plans. Exhibit 6 shows the locations of these planning areas.

Table 13: Sites within BLM Resource Management Plan Areas

Site Name	Resource Management Plan
Avocado Flats	SCRMP
Big Maria	YRMP
Black Jack	NECD
Corn Springs	NECD
Estelle Mountain (A)	SCRMP

Table 13 (Cont.): Sites within BLM Resource Management Plan Areas

Site Name	Resource Management Plan
Estelle Mountain (B)	SCRMP
Rice	NECD
Road 177	NECD
Spring Hill	NECD
Vidal Junction	NECD
Whitewater	CVA
Wileys Well	NECD

Sites located on BLM lands will be expected to submit an analysis of the project’s impacts for review by the respective BLM Field Office before use authorization to construct can be granted. These sites will also be required to undergo separate analysis under NEPA to evaluate their potential environmental impacts. Sites located on BLM lands are not subject to either the WRMSHCP or the CVMSHCP.

5.1.13 - Summary of Findings

As was noted earlier, the main body of this habitat assessment presents only a summary of the findings for each site. That summary is contained above and also in Table 14, below. Detailed information for each site regarding existing conditions, sensitive biological resources, applicable management plans, and other information is contained in Appendix A of this document. Readers desiring detailed information about a particular site or those who are interested in how the assessment arrived at the conclusions presented here are directed to the individual site descriptions in Appendix A.

Table 14: Biological Resources Summary

Site Name	Located within Critical Habitat	Applicable Management Plan	Located within a Criteria Cell or Conservation Area	Located within an SKRHCP Reserve or Fee Area	Potential to Impact Jurisdictional Waters	Potential to Impact CDNPA Listed Plants	Potential to Impact Nesting Birds	Protected Species For Which Suitable Habitat is Present	Focused Surveys Required
Arlington	No	WRMSHCP – Cities of Riverside and Norco Area Plan	No	Fee Area	No	No	No	None	None
Avocado Flats	No	BLM – SCRMP	No	No	No	No	Yes	Coastal California gnatcatcher	None
Big Maria	No	BLM – YRMP	No	No	No	No	No	None	None
Black Eagle	No	None	No	No	No	No	No	None	None
Black Jack	No	BLM – NECD	No	No	No	Catclaw acacia	Yes	Desert tortoise	Desert tortoise
Blue Mountain	Coastal California gnatcatcher	None	No	No	No	No	No	None	None
Box Springs	No	WRMSHCP – Reche Canyon/Badlands Area Plan, SU-1 Sycamore Canyon/Box Springs Sub-unit	Criteria Cell 640	Fee Area	No	No	Yes	None	None
Brookside	No	WRMSHCP – The Pass Area Plan	No	No	Yes	No	No	None	None

Table 14: (Cont) Biological Resources Summary

Site Name	Located within Critical Habitat	Applicable Management Plan	Located within a Criteria Cell or Conservation Area	Located within an SKRHCP Reserve or Fee Area	Potential to Impact Jurisdictional Waters	Potential to Impact CDNPA Listed Plants	Potential to Impact Nesting Birds	Protected Species For Which Suitable Habitat is Present	Focused Surveys Required
Cajalco	No	WRMSHCP – Temescal Canyon Area Plan, SU4-Sierra Hills/Lake Mathews West Sub-unit	Criteria Cell 7355	Fee Area	No	No	Yes	San Diego ambrosia, Stephens’ kangaroo rat, Brand’s phacelia, San Miguel savory	San Diego ambrosia, Brand’s phacelia, San Miguel savory
Corn Springs	Desert tortoise	BLM – NECD	No	No	Yes	Desert ironwood	Yes	Desert tortoise	Desert tortoise
Corona	No	WRMSHCP – Temescal Canyon Area Plan	No	No	No	No	No	None	None
El Cariso	No	CNFMP	No	No	Yes	No	Yes	None	None
Elsinore Peak	Munz’s onion	CNFMP	No	No	No	No	Yes	Munz’s onion	Munz’s onion
Estelle Mountain A	Quino checkerspot butterfly	BLM – SCRMP	No	No	No	No	Yes	Quino checkerspot butterfly, Stephens’ kangaroo rat	Quino checkerspot butterfly, Stephens’ kangaroo rat
Estelle Mountain B	Quino checkerspot butterfly	BLM – SCRMP	No	No	No	No	Yes	Quino checkerspot butterfly, Stephens’ kangaroo rat	Quino checkerspot butterfly, Stephens’ kangaroo rat
Glen Avon	No	WRMSHCP – Jurupa Area Plan SU2-Jurupa Mountains sub-unit	Criteria Cell 42	Fee Area	No	No	Yes	San Miguel savory	San Miguel savory

Table 14: (Cont) Biological Resources Summary

Site Name	Located within Critical Habitat	Applicable Management Plan	Located within a Criteria Cell or Conservation Area	Located within an SKRHCP Reserve or Fee Area	Potential to Impact Jurisdictional Waters	Potential to Impact CDNPA Listed Plants	Potential to Impact Nesting Birds	Protected Species For Which Suitable Habitat is Present	Focused Surveys Required
Green River	No	WRMSHCP – Temescal Canyon Area Plan, SU2-Prado Dam sub-unit	Criteria Cell 1520	No	No	No	Yes	Braunton’s milk-vetch, Coastal California gnatcatcher, San Miguel savory, Burrowing owl	Braunton’s milk-vetch, San Miguel savory, Burrowing owl
Homeland	No	WRMSHCP – Harvest Valley/ Winchester Area Plan	No	Fee Area	No	No	Yes	None	None
Iron Mountain	No	None	No	No	No	No	No	None	None
Joshua Tree	No	None	No	No	No	No	No	None	None
Lake Elsinore	No	WRMSHCP – Elsinore Area Plan	No	Fee Area	No	No	Yes	Stephens’ kangaroo rat	None
Lake Mathews	No	WRMSHCP – Lake Mathews/Woodcrest Area Plan	No	Fee and Reserve Area	No	No	Yes	Stephens’ kangaroo rat, San Miguel savory, Burrowing owl	Stephens’ kangaroo rat, San Miguel savory, Burrowing owl
Lake Riverside	Quino checkerspot butterfly	WRMSHCP – REMAP Area Plan, SU4- Tule Creek/Anza Valley subunit	Criteria Cell 7113	No	No	Mojave Yucca, Beavertail Cactus	Yes	Quino checkerspot butterfly	None

Table 14: (Cont) Biological Resources Summary

Site Name	Located within Critical Habitat	Applicable Management Plan	Located within a Criteria Cell or Conservation Area	Located within an SKRHCP Reserve or Fee Area	Potential to Impact Jurisdictional Waters	Potential to Impact CDNPA Listed Plants	Potential to Impact Nesting Birds	Protected Species For Which Suitable Habitat is Present	Focused Surveys Required
Leona	Quino checkerspot butterfly	WRMSHCP – Lake Mathews/Woodcrest Area Plan, SU3- Gavilan Hills West subunit	Criteria Cell 2858	Fee Area	No	Snake Cholla	Yes	Coastal California gnatcatcher, Quino checkerspot butterfly, Burrowing owl,	Burrowing owl
Line	No	CVMSHCP	No	No	Yes	No	Yes	None	None
Margarita (MWD)	Coastal California gnatcatcher	WRMSHCP – Southwest Area Plan, SU1- Murrieta Creek Sub-unit	Criteria Cell 7355	Fee Area	Yes	No	Yes	Coastal California gnatcatcher, Stephens’ kangaroo rat	None
Margarita (SDSU)	No	WRMSHCP – Southwest Area Plan, SU1- Murrieta Creek Sub-unit	No	Fee Area	No	No	Yes	Quino checkerspot butterfly	None
Marshell	No	WRMSHCP – Lake Mathews/Woodcrest Area Plan	No	Fee Area	No	No	Yes	Stephens’ kangaroo rat, San Miguel savory	San Miguel savory
Mead Valley	No	WRMSHCP – Mead Valley Area Plan	No	Fee Area	No	No	No	None	None

Table 14: (Cont) Biological Resources Summary

Site Name	Located within Critical Habitat	Applicable Management Plan	Located within a Criteria Cell or Conservation Area	Located within an SKRHCP Reserve or Fee Area	Potential to Impact Jurisdictional Waters	Potential to Impact CDNPA Listed Plants	Potential to Impact Nesting Birds	Protected Species For Which Suitable Habitat is Present	Focused Surveys Required
Mecca Landfill	No	CVMSHCP	No	No	No	No	Yes	None	None
Menifee	No	WRMSHCP – Sun City/ Menifee Valley Area Plan	No	Fee Area	No	No	No	None	None
Morongo	No	CVMSHCP	No	No	No	Snake Cholla, Barrel Cactus	Yes	Desert tortoise, Coachella Valley milk-vetch	None
Paradise	No	WRMSHCP – Cities of Riverside and Norco Area Plan	No	No	No	No	Yes	Stephens’ kangaroo rat, San Diego ambrosia	None
Quail Valley	No	WRMSHCP – Sun City / Menifee Valley Area Plan	No	Fee Area	No	No	Yes	Quino checkerspot butterfly, Coastal California gnatcatcher, Stephens’ kangaroo rat	None
Rancho Carrillo	No	CNFMP	No	No	No	No	Yes	None	None
Ranger Peak	No	SBNFMP	No	No	No	No	Yes	None	None
Red Mountain	No	SBNFMP	No	No	No	Chaparral yucca	Yes	Quino checkerspot butterfly	Quino checkerspot butterfly

Table 14: (Cont) Biological Resources Summary

Site Name	Located within Critical Habitat	Applicable Management Plan	Located within a Criteria Cell or Conservation Area	Located within an SKRHCP Reserve or Fee Area	Potential to Impact Jurisdictional Waters	Potential to Impact CDNPA Listed Plants	Potential to Impact Nesting Birds	Protected Species For Which Suitable Habitat is Present	Focused Surveys Required
Redondo Mesa	No	WRMSHCP - Southwest Area Plan, SU7 - Tenaja sub-unit	Criteria Cell 7025	No	No	No	Yes	None	None
Rice	No	BLM – NECD	No	No	No	Beavertail cactus	Yes	Desert tortoise	Desert tortoise
Road 177	No	BLM – NECD	No	No	No	No	Yes	Desert tortoise	Desert tortoise
Santa Rosa Peak	No	CVMSHCP	No	No	No	No	Yes	None	None
Santiago Peak	No	CNFMP	No	No	No	Chaparral yucca	Yes	None	None
Spring Hill	Desert tortoise	BLM – NECD	No	No	No	Ocotillo, Jumping cholla	Yes	Desert tortoise	Desert tortoise
Sunnyslope	No	WRMSHCP – Jurupa Area Plan	No	No	No	Snake Cholla	Yes	San Diego ambrosia, Coastal California gnatcatcher, San Miguel savory, Brand’s phacelia	San Diego ambrosia, San Miguel savory, Brand’s phacelia
Temescal	No	WRMSHCP – Temescal Area Plan, SU3 - Temescal Wash West sub-unit	Criteria Cell 3035	No	No	No	Yes	San Diego ambrosia, Stephens’ kangaroo rat, San Miguel savory	San Diego ambrosia, San Miguel savory

Table 14: (Cont) Biological Resources Summary

Site Name	Located within Critical Habitat	Applicable Management Plan	Located within a Criteria Cell or Conservation Area	Located within an SKRHCP Reserve or Fee Area	Potential to Impact Jurisdictional Waters	Potential to Impact CDNPA Listed Plants	Potential to Impact Nesting Birds	Protected Species For Which Suitable Habitat is Present	Focused Surveys Required
Timoteo	No	WRMSHCP – Reche Canyon/Badlands Area Plan, SU3 - Badlands North sub-unit	Criteria Cell 562	Fee Area	No	Chaparral Yucca	Yes	Nevin’s barberry, Stephens’ kangaroo rat	Nevin’s barberry was not present
Vaquero	No	WRMSHCP – Southwest Area Plan	No	No	No	No	Yes	None	None
Vidal Junction	Desert tortoise	BLM – NECD	No	No	Yes	No	Yes	Desert tortoise	Desert tortoise
Whitewater	No	CVMSHCP BLM Coachella Valley Amendment to the California Desert Conservation Area Plan	Upper Mission Creek/ Big Morongo Canyon Conservation Area	No	No	No	Yes	Desert tortoise, Burrowing owl	Desert tortoise, Burrowing owl
Wileys Well	Desert tortoise	BLM – NECD	No	No	Yes	No	Yes	Desert tortoise, Coachella Valley fringe-toed lizard	Desert tortoise, Coachella Valley fringe-toed lizard
Winchester	No	WRMSHCP – Harvest Valley/Winchester Area Plan	No	Fee Area	No	No	Yes	San Diego ambrosia, Stephens’ kangaroo rat, Coastal California gnatcatcher	San Diego ambrosia

Table 14: (Cont) Biological Resources Summary

Site Name	Located within Critical Habitat	Applicable Management Plan	Located within a Criteria Cell or Conservation Area	Located within an SKRHCP Reserve or Fee Area	Potential to Impact Jurisdictional Waters	Potential to Impact CDNPA Listed Plants	Potential to Impact Nesting Birds	Protected Species For Which Suitable Habitat is Present	Focused Surveys Required
<p>BLM = Bureau of Land Management CDNPA = California Desert Native Plants Act CNFMP = Cleveland National Forest Management Plan CVMSHCP = Coachella Valley Multiple Species Habitat Conservation Plan NECD = Northern and Eastern Colorado Desert amendment to the California Desert Conservation Area Plan SBNFMP = San Bernardino National Forest Management Plan SCRMP = South Coast Regional Management Plan USFS = U.S. Forest Service WRMSHCP = Western Riverside Multiple Species Habitat Conservation Plan YRMP = Yuma Field Office Resource Management Plan</p>									

SECTION 6: RECOMMENDATIONS

This section contains recommendations that are designed to lessen or eliminate the impacts of the proposed on biological resources. Prior to the development of the sites, the following measures are recommended for each proposed tower location, as applicable. Following this list of recommendations is a table (Table 15) that lists the proposed sites and the recommendation measures that apply to each site.

- BR-1** If any construction related to the proposed project, such as access roads, is anticipated to occur outside of the area surveyed for the June 2, 2008 Habitat Assessment Report, then additional habitat assessments shall be conducted by a qualified biologist prior to development to evaluate potential impacts. If these expanded surveys find that sensitive biological resources are present in the area to be impacted, then appropriate measures consistent with applicable laws and policies in effect at the time of the survey shall be undertaken to avoid or mitigate identified impacts. If the expanded surveys do not find sensitive biological resources in the area to be impacted, then development may then commence unimpeded within the parameters of applicable laws and policies governing such development.
- BR-2** If the amount of time between the date of the habitat assessment survey, indicated in Table 3 of the June 2, 2008 Habitat Assessment Report, and the commencement of construction exceeds 18 months, a qualified biologist must determine if potential changes in conditions on the site warrant the initiation of additional survey work. If the determination is made that additional survey work is required, then surveys must be conducted by a qualified biologist prior to site development. If subsequent surveys find that sensitive biological resources have taken up occupancy of the site and may be impacted by development, then appropriate measures consistent with applicable laws and policies in effect at the time of the survey shall be undertaken prior to site development to avoid or mitigate identified impacts. If conditions at the site have not changed considerably and sensitive biological resources are not found, then development may commence unimpeded.
- BR-3** If a proposed site is located within a USFWS-designated Critical Habitat area for a federally listed species, but is located outside of an established Habitat Conservation Plan (HCP), then appropriate FESA consultation with the USFWS must be undertaken prior to site development. If suitable habitat for the species is present on or adjacent to the project, then focused surveys shall be undertaken to determine presence or absence of the listed species. This survey requirement may be avoided if the listed species' occupancy of the site is preemptively assumed.

- BR-4** If a proposed site is located in an area of close proximity to suitable habitat for a species listed under the FESA or CESA as threatened or endangered, then pre-construction surveys of the area shall be performed by a qualified and/or USFWS permitted biologist to determine presence or absence of the species in the area. If it is determined that no listed species are present in the area, then development may commence without further impediment. If it is determined that a listed species is present in the area, then appropriate avoidance measures shall be implemented to avoid inadvertent take of the listed species. Avoidance measures may include, but may not be limited to; 1) Postponement of construction until the species has vacated the area; 2) The installation of exclusion fencing or other barriers to assure that the species does not enter the construction area; or 3) other avoidance measures as recommended by the biologist.
- BR-5** Prior to the commencement of construction at any site, coverage must be obtained under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit 99-08-DWQ) from the appropriate RWQCB with jurisdiction over the site. As part of the permit process, a SWPPP must be developed that meets the requirements of the applicable RWQCB and lists BMPs that will be implemented to protect and control storm water runoff from the site.
- BR-6** If construction of a proposed site has the potential to impact nesting birds during avian nesting season as indicated in the "Potential to Impact Nesting Birds" column of Table 14 of the June 2, 2008 Habitat Assessment Report, then one of the following must occur: 1) Construction should occur outside of the avian nesting season (approximately February 1 through August 31); 2) If construction must occur during the nesting season, then a pre-construction nesting bird survey of the site shall be conducted by a qualified biologist no more than thirty days prior to construction activities. If active nests are found onsite, then they must be avoided by an appropriate buffer until any young birds have fledged and the nest has completed its cycle, as determined by a qualified biologist. If construction occurs outside of the avian nesting period, then construction may commence without further impediment.
- BR-7** The use of towers utilizing permanent ground-anchored guy-wires should be avoided. If site constraints or other factors make the construction of a self-supporting tower infeasible and a guy-wire supported tower is identified as the only practical alternative, then each of the following measures must be implemented: 1) the number of guy-wires must be limited to the minimum number necessary to meet the engineering requirements of the structure; 2) guy-wires shall be equipped with appropriate daytime visual markers (e.g., bird diverter devices) to lessen the potential for collision by birds with the guy-wires; 3) The services of a qualified professional

shall be retained to develop specific requirements for the types of diverters, the spacing of the devices upon the wires, and other criteria necessary to minimize impacts to avian species.

- BR-8** If a communication tower is proposed and is for whatever reason required to install and maintain aircraft warning lights, then the minimum amount of lighting required by the FAA shall be used. Where permissible by the FAA, only white strobe lights shall be used at night. These lights shall be up-shielded to minimize disruption to local residents, and shall be the minimum number, with minimum intensity and number of flashes per minute (i.e., the longest duration between flashes) allowed by the FAA. Unless specifically required by the FAA, the use of solid red or pulsating red warning lights shall be avoided at night.
- BR-9** Security lighting or other nighttime lighting for on-ground facilities and equipment shall be down-shielded to keep light within the boundaries of the site and to minimize its potential attraction for birds.
- BR-10** If the installation of a communication tower facility has the potential to impact native desert plants protected under the California Desert Native Plants Act as identified in the "Potential to Impact CDNPA Listed Plants" column of Table 14 of the June 2, 2008 Habitat Assessment Report, then those plant specimens shall be avoided to the maximum extent feasible. If a listed plant cannot be avoided, then the appropriate removal permit must be obtained from the relevant official. Permits may be obtained from the Agricultural Commissioner or Sheriff of the relevant county.
- BR-11** A consistency analysis shall be prepared for all sites governed by the WRMSHCP. This analysis may be presented as a master document that incorporates analysis for all of the sites rather than separate documents for each site. Regardless of the manner in which the analysis is presented, the development of each site must be found consistent with the WRMSHCP by the RCA and payment of the mandatory mitigation fee must be submitted prior to the site's development. Payment of the fee and a determination of consistency with the requirements of the WRMSHCP is intended to provide full mitigation under CEQA, NEPA, CESA, and FESA for impacts to the species and habitats covered by the WRMSHCP.
- BR-12** If a site is located within a Criteria Cell as defined in the WRMSHCP, then the County shall enter into a HANS process with the Riverside County Environmental Planning Department (EPD) or the appropriate WRMSHCP participant. Once the HANS application is deemed complete, a HANS Criteria Determination Letter shall be issued. The application and letter must then be reviewed and accepted by the Regional Conservation Authority prior to site development.

- BR-13** If a site is proposed to be located within an area that is governed by the WRMSHCP, and is also listed in the “Focused Surveys Required” column of Table 14 of the June 2, 2008 Habitat Assessment Report, then additional focused surveys must be conducted for those species according to established survey protocols. If the species is found to be present on the site, then the site shall be considered occupied suitable habitat, and, if it is not feasible to conserve at least 90 percent of the area, then the County must submit an analysis supporting a DBESP. The DBESP discussion shall list why avoidance is not possible, quantify unavoidable impacts, propose project design features and mitigation measures to reduce indirect effects, and demonstrate that the project would be biologically equivalent or superior to avoidance.
- BR-14** A consistency analysis shall be prepared for all sites governed by the CVMSHCP. This analysis may be presented as a master document that incorporates analysis for all of the sites rather than separate documents for each site. Regardless of the manner in which the analysis is presented, the development of each site must be found consistent with the CVMSHCP by the CVAG and payment of the mandatory mitigation fee must be submitted prior to the site’s development. Payment of the fee and a determination of consistency with the requirements of the CVMSHCP are intended to provide full mitigation under CEQA, NEPA, CESA, and FESA for impacts to the species and habitats covered by the CVMSHCP.
- BR-15** If a site is proposed to be located within a conservation area as designated by the CVMSHCP, then the proposed development shall be reviewed under the appropriate review process in effect at the time of application. During the interim period prior to final MSHCP adoption, participants in this review are assumed to be the USFWS and the CDFG. Following the MSHCP’s adoption, the reviewing authority is assumed to be the CVCC. Regardless of the reviewing authority or process in effect at the time of application, appropriate review must take place and the specific direction of the reviewing authorities implemented prior to site development.
- BR-16** If any federal or State listed threatened or endangered species are listed as potentially occurring upon any site and those species are covered under either the WRMSHCP or CVMSHCP, then all feasible avoidance measures will be implemented to ensure no take of the species occurs.
- BR-17** If a site is proposed to be located within a SKRHCP Fee Area, then the mandatory mitigation fee shall be paid. Payment of the fee is intended to provide full mitigation to Stephens’ kangaroo rat under CEQA, NEPA, CESA, and FESA through the SKRHCP.

BR-18 If a site is proposed to be located within an SKR Reserve Area, then focused surveys for Stephens' kangaroo rat shall be conducted to determine the occupancy status of the species on the site. If the species is determined to be present on the site, an area of suitable habitat, at a minimum replacement ratio of one to one and approved by both the CDFG and the USFWS, shall be purchased and managed as a reserve area.

BR-19 If a site is proposed to be located on lands managed by an agency of the federal government, then development of the site must be reviewed by the agency prior to site development and found to be consistent with the agency's applicable resource management plan.

Table 15: Recommendation Measures

Site Name	Recommendation Measures
Arlington	BR-1, 2, 5, 8, 9, 11, 17
Avocado Flats	BR-1, 2, 4, 5, 6, 8, 9, 19
Big Maria	BR-1, 2, 5, 8, 9, 19
Black Eagle	BR-1, 2, 5, 8, 9
Black Jack	BR-1, 2, 5, 6, 8, 9, 10, 19
Blue Mountain	BR-1, 2, 3, 5, 8, 9
Box Springs	BR-1, 2, 5, 6, 8, 9, 11, 12, 17
Brookside	BR-1, 2, 5, 8, 9, 11
Cajalco	BR-1, 2, 5, 6, 8, 9, 11, 12, 13, 16, 17
Corn Springs	BR-1, 2, 3, 5, 6, 8, 9, 10, 19
Corona	BR-1, 2, 5, 8, 9, 11
El Cariso	BR-1, 2, 5, 6, 8, 9, 19
Elsinore Peak	BR-1, 2, 3, 5, 6, 8, 9, 19
Estelle Mountain (A)	BR-1, 2, 3, 5, 6, 8, 9, 19
Estelle Mountain (B)	BR-1, 2, 3, 5, 6, 8, 9, 19
Glen Avon	BR-1, 2, 5, 6, 8, 9, 11, 12, 13, 17
Green River	BR-1, 2, 4, 5, 6, 8, 9, 11, 12, 13, 16
Homeland	BR-1, 2, 5, 6, 8, 9, 11, 17
Iron Mountain	BR-1, 2, 5, 8, 9
Joshua Tree	BR-1, 2, 5, 8, 9
Lake Elsinore	BR-1, 2, 5, 6, 8, 9, 11, 17
Lake Mathews	BR-1, 2, 5, 6, 8, 9, 11, 13, 18
Lake Riverside	BR-1, 2, 5, 6, 8, 9, 11, 12, 16

Table 15 (Cont.): Recommendation Measures

Site Name	Recommendation Measures
Leona	BR-1, 2, 5, 6, 8, 9, 10, 11, 12, 13, 16, 17
Line	BR-1, 2, 5, 6, 7, 8, 9, 14
Margarita (MWD)	BR-1, 2, 5, 6, 8, 9, 11, 12, 16, 17
Margarita (SDSU)	BR-1, 2, 5, 6, 8, 9, 11, 16, 17
Marshall	BR-1, 2, 5, 6, 8, 9, 11, 13, 17
Mead Valley	BR-1, 2, 5, 8, 9, 11, 17
Mecca Landfill	BR-1, 2, 5, 6, 8, 9, 14
Menifee	BR-1, 2, 5, 8, 9, 11, 17
Morongo	BR-1, 2, 5, 6, 8, 9, 10, 14, 16
Paradise	BR-1, 2, 5, 6, 8, 9, 11
Quail Valley	BR-1, 2, 5, 6, 8, 9, 11, 16, 17
Rancho Carrillo	BR-1, 2, 5, 6, 8, 9, 19
Ranger Peak	BR-1, 2, 5, 6, 8, 9, 19
Red Mountain	BR-1, 2, 5, 6, 8, 9, 10, 19
Redondo Mesa	BR-1, 2, 5, 6, 8, 9, 11, 12
Rice	BR-1, 2, 5, 6, 8, 9, 10, 19
Road 177	BR-1, 2, 5, 6, 8, 9, 19
Santa Rosa Peak	BR-1, 2, 5, 6, 8, 9, 14
Santiago Peak	BR-1, 2, 5, 6, 8, 9, 10, 19
Spring Hill	BR-1, 2, 3, 5, 6, 7, 8, 9, 10, 19
Sunnyslope	BR-1, 2, 5, 6, 8, 9, 10, 11, 13, 16
Temescal	BR-1, 2, 5, 6, 8, 9, 11, 12, 13
Timoteo	BR-1, 2, 5, 6, 8, 9, 10, 11, 12, 17
Vaquero	BR-1, 2, 5, 6, 8, 9, 11
Vidal Junction	BR-1, 2, 3, 5, 6, 8, 9, 19
Whitewater	BR-1, 2, 5, 6, 8, 9, 14, 15, 19
Wileys Well	BR-1, 2, 3, 5, 6, 8, 9, 19
Winchester	BR-1, 2, 5, 6, 8, 9, 11, 13, 16, 17

SECTION 7: CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: June 3, 2008

Signed:



Steve Norton
Michael Brandman Associates
Irvine, CA

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Appendix A: Study Area Data

Arlington

Avocado Flats

Big Maria

Black Eagle

Black Jack

Blue Mountain

Box Springs

Brookside

Cajalco

Corn Springs

Corona

El Cariso

Elsinore Peak

Estelle Mountain (A)

draft

Estelle Mountain (B)

Glen Avon

Green River

Homeland

Iron Mountain

Joshua Tree

Lake Elsinore

Lake Mathews

Lake Riverside

Leona

Line

Margarita (MWD)

Margarita (SDSU)

draft

Marshall

Mead Valley

Mecca Landfill

Menifee

Morongo

Paradise

Quail Valley

Rancho Carrillo

Ranger Peak

Red Mountain

Redondo Mesa

Rice

Road 177

Santa Rosa Peak

Santiago Peak

Spring Hill

Sunnyslope

Temescal

Timoteo

Vaquero

Vidal Junction

Whitewater

Wileys Well

Winchester