

AECOM 401 West A Street Suite 1200 San Diego, CA 92101 www.aecom.com 619.610.7600 tel 619.610.7601 fax

August 29, 2016

Paul Yamazaki Senior Biologist Corporate Environmental Services Southern California Edison Irwindale Gateway Center - 190i 6040 N. Irwindale Avenue, Suite A Irwindale, CA 91702

Subject: Riverside Transmission Reliability Project – Habitat Assessment Results

Dear Mr. Paul Yamazaki:

Southern California Edison (SCE) contracted AECOM to conduct habitat assessments and subsequent focused protocol surveys for a number of special-status species along and adjacent to the Riverside Transmission Reliability Project (RTRP) alignment (Project). These surveys are in response to data requests received from the California Public Utilities Commission (CPUC) during their review of SCE's Application for a Certificate of Public Convenience and Necessity. At the request of SCE, this letter report summarizes the findings of a literature review and habitat assessment intended to identify suitable habitat, and areas needing focused surveys, for the following species:

- Delhi Sands flower-loving fly (Rhaphiomidas terminatus abdominalis)
- Least Bell's vireo (Vireo bellii pusillus)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Western yellow-billed cuckoo (Coccyzus americanus occidentalis)
- Los Angeles pocket mouse (Perognathus longimembris brevinasus)
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)
- San Bernardino kangaroo rat (Dipodomys merriami parvus)
- San Diego ambrosia (Ambrosia pumila)
- Brand's phacelia (Phacelia stellaris)
- San Miguel savory (Satureja chandleri)
- Other Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Special-Status Plant Species (Including Criteria Area and Narrow Endemic Plant Species) along the Project, where relevant.

This letter report includes the following sections:

- Section 1.0 Introduction
 - Section 1.1 Project Location
 - Section 1.2 Project Description
- Section 2.0 Methods
 - Section 2.1 Historical Literature and Database Review
 - Section 2.2 Riparian Bird Habitat Assessment
 - Section 2.3 Small Mammal Habitat Assessment
 - Section 2.4 Delhi Sands Flower-loving Fly Habitat Assessment
 - Section 2.5 Rare Plants Habitat Assessment



- Section 3.0 Results and Discussion
 - Section 3.1 Riparian Bird Habitat Assessment
 - Section 3.2 Small Mammal Habitat Assessment
 - Section 3.3 Delhi Sands Flower-loving Fly Habitat Assessment
 - Section 3.4 Rare Plants Habitat Assessment
- Section 4.0 Recommendations
 - Section 4.1 Riparian Birds
 - Section 4.2 Small Mammals
 - Section 4.3 Dehli Sands Flower-loving Fly
 - Section 4.4 Rare Plants
- References

1.0 INTRODUCTION

1.1 Project Location

The Project is located in the northwest portion of Riverside County, north of Norco and south and east of Mira Loma (Figure 1). The western (north-south) segment of the Project alignment is located just east of Interstate 15 (Figure 2). The northern terminus occurs just west of the intersection of Galena Street and Wineville Avenue, while the southern end of the western segment makes a 90-degree turn at 68th Street before heading east (Figure 2). The southern (east-west) segment of the alignment occurs just south of the Santa Ana River, terminating just east of Wilderness Avenue (Figure 2).

1.2 **Project Description**

The Project is a joint venture with Riverside Public Utilities (RPU) to provide a new 230kilovolt (kV) transmission line connection to RPU's transmission system and increase the reliability of their grid. SCE's scope of work includes construction of the following:

- Approximately 10 miles of new 230kV transmission line
- Access roads
- Towers
- Telecom
- Two Marshalling Yards



2.0 METHODS

Habitat assessments were conducted separately for each taxa/species by a respective specialist(s). The habitat assessments generally included areas within 500 feet of each Project component (including two marshalling yards) as well as 100 feet on either side of Project-related access roads identified by SCE. The only instance where this standard buffer was not implemented was the focused survey for San Diego ambrosia—surveys were conducted within and adjacent to the proposed impact areas. Detailed methodologies for each survey are included in Sections 2.2 through 2.5.

The biologists determined the location and extent of suitable habitat for the target species and delineated the limits of said habitat in the field using orthorectified aerial maps depicting the Project components and survey buffers. All suitable habitat was later digitized and quantified using Geographic Information System (GIS) software. To gain knowledge of the existing conditions within the Project area and vicinity, a historical literature and database review were first implemented before going in the field.

2.1 <u>Historical Literature and Database Review</u>

The 2010 RTRP Biological Resources Technical Report (BRTR) prepared by Power Engineers, Inc. (Power Engineers, Inc. 2010), and the protocol survey reports included within, were reviewed prior to conducting the fieldwork to understand the conditions of the Project area and better prepare for the contracted fieldwork (Tasks 2.2 through 2.5 described below). The information contained in the BRTR was later compared to the results of Tasks 2.2 through 2.5 (described below) to reassess the extent of suitable habitat for the aforementioned species since they were previously evaluated in 2010. From this comparison, recommendations could be made for focused surveys in the spring and summer of 2016. Outside of Project-specific literature, select data pertaining to the natural resources of the region were also reviewed prior to conducting the field surveys. The following sources were consulted to obtain public information relevant to the Project site:

- Western Riverside County MSHCP(RCIP 2004); and
- Riverside County Integrated Plan Online Conservation Report Generator (RCIP 2016).

2.2 <u>Riparian Bird Habitat Assessment</u>

A habitat assessment was conducted within 500 feet of each Project component, including two marshalling yards (Riparian Bird Survey Area), to determine the location and extent of riparian habitat along the Project alignment capable of supporting three listed avian species: the federal- and state-endangered least Bell's vireo, the federally and state-endangered southwestern willow flycatcher, and the federally and state-endangered western yellow-billed cuckoo. Prior to conducting the survey, the BRTR and aerial photographs were consulted to determine areas previously occupied by the species and areas where the habitat assessment survey should be focused. On May 9, 2016, AECOM avian biologists



James McMorran and Emma Fraser qualitatively described the riparian habitat on-site and included information such as species composition and structure. The avian biologists mapped the areas of riparian habitat best suited to support the three target species onto orthorectified aerial field maps. Contiguous spans of primarily mature riparian habitat were considered capable of supporting the target species. Small patches of early seral riparian habitat or riparian scrub, which were disconnected from more mature riparian areas, were considered unsuitable due to the lack of cover and protection offered for nesting and roosting birds.

2.3 Small Mammal Habitat Assessment

A habitat assessment was conducted for three southern California heteromyid small mammals: the federally endangered San Bernardino Kangaroo rat (SBKR), the California Department of Fish and Wildlife (CDFW) Species of Special Concern (SSC) Los Angeles little pocket mouse (LAPM), and the SSC San Diego pocket mouse (SDPM). The habitat assessment was conducted within 500 feet of each Project component, including two marshalling yards (Small Mammal Survey Area). On June 2 and 4, 2016, two biologists from SJM Biological Consultants, Inc.determined which, if any, parts of the Small Mammal Survey Area exhibited habitat conditions suitable to support the target species. Both biologists held U.S. Fish and Wildlife Service (USFWS) 10a(1)(A) recovery permits for SBKR and CDFW Memorandums of Understanding. The three target small mammal species are typically associated with sage scrub communities in sandy loam and loamy sand soils in the region of the current Project (e.g., see RCIP 2002). The habitat types preferred by each species, as well as atypical but known occupied habitat types for each species and designated critical habitat, were used as guidelines in assessing the potential for these mammals to occur within the Small Mammal Survey Area.

Using species-specific habitat requirements, all areas exhibiting potentially suitable conditions for one or more of the three target species were recorded as polygons on aerial maps and slated for subsequent trapping.

2.4 Delhi Sands Flower-loving Fly Habitat Assessment

Delhi Sands flower-loving fly (DSFLF) permitted biologist Ken Osborne completed the habitat assessment within 500 feet of each Project component, including two marshalling yards (DSFLF Survey Area), on June 8, 2016. The evaluation of suitable habitat for DSFLF involved a two-step or two-tiered process. First, because DSFLF is restricted to Aeolian Delhi sands soils (characterized as Delhi sands in Ballmer 1989 and USFWS 1996), soil survey maps (Knecht 1971) were first consulted to determine those undeveloped portions of the DSFLF Survey Area that fall within these mapped Delhi sands. The soils of particular interest are Delhi fine sand (DaD2; Knecht 1971) and Delhi loamy fine sand (DbA; Knecht 1971). Areas clearly outside of Delhi sands soils were deemed unsuitable for the DSFLF. Secondly, those portions of the DSFLF Survey Area that fall within mapped Delhi sands, and areas immediately adjacent to these mapped soils (boundaries between soil types are sometimes blended or blurred on lands that have long been subject to disking), were



ground-proofed and investigated for suitable conditions. Habitat suitability for DSFLF was evaluated using indicators such as presence and abundance of loose, unconsolidated Delhi sands with low organic contamination; presence of sand-associated insects; degree of habitat disturbance indicated by plant species composition and disposition of soil surface; presence and abundance of native sand-associated plant species often associated with Delhi sands and indicative of relative disturbance regimens (i.e., conditions with lesser disturbance being of higher quality for DSFLF) such as California croton (*Croton californicus*), telegraph weed (*Heterotheca grandiflora*), Thurber's buckwheat (*Eriogonum thurberi*), California buckwheat (*Eriogonum fasciculatum*), and golden crownbeard (*Verbesina encelioides*). Habitat evaluations for the northern portions of the Project were previously undertaken by Ken Osborne in 2010. Reports for the previous habitat assessment and focused surveys were reviewed as part of this evaluation (Osborne 2010, 2011).

In the course of previous work (Osborne 2003; Osborne et al. 2003), Ken Osborne developed a means of rating habitat on a given site for its potential to support DSFLF. Areas were rated on a scale of 1 to 5, with 5 being the best quality and most suitable habitat based on the following scheme:

- 1. Developed areas, non-Delhi sands soils with high clay, silt, and/or gravel content. Delhi sands extensively and deeply covered by dumping of exotic soils, rubble, trash, manure, or organic debris. Unsuitable.
- 2. Delhi sands are present but the soil characteristics include a predominance of exotic soils such as alluvial materials, or predominance of other foreign contamination as gravels, manure, or organic debris. Severe and frequent disturbance (such as a maintenance yard or high use roadbed). Very Low Quality.
- 3. Moderately contaminated Delhi sands. Delhi sands with moderate to high disturbance (such as annual disking). Sufficient Delhi sands are present to prevent soil compaction (related to contamination by foreign soils). Some sandy soils exposed on the surface due to fossorial animal activity. Low Quality.
- 4. Abundant clean Delhi sands with little or no foreign soils (such as alluvial material) present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. May represent high quality habitat with mild or superficial disturbance. Moderate Quality.
- 5. Sand dune habitat with clean Delhi sands. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. Sand associated plant and arthropod species may be abundant. High Quality.



It should be noted that habitat qualities often vary spatially within a site so that conditions on a site fall within a range of qualities. Further, overall habitat quality is affected by the overall habitat area on a site, such that very small areas diminish the overall habitat value of a site. Use of this habitat rating system is somewhat subjective and best undertaken by a biologist who has extensive experience with *Rhaphiomidas* species. While investigating the DSFLF Survey Area, Ken Osborne implemented an analysis of this kind to provide a general estimate of overall habitat conditions relevant to DSFLF potential.

2.5 Rare Plant Habitat Assessment

The rare plant habitat assessment included an evaluation of the areas within 500 feet of each Project component (Rare Plant Survey Area) to support rare plants, including San Diego ambrosia, Brand's phacelia, San Miguel savory, and other special-status plant species. Rare species may also be referred to as special-status species due to their "status" and recognition by regulatory or institutional entities with authority in determining rarity, endangerment, or declining populations. Plant species were considered special-status species if they were classified as one or more of the following:

- Officially listed by California or the federal government as endangered, threatened, or rare;
- A candidate for state or federal listing as endangered, threatened, or rare;
- Taxa listed in the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California;
- Taxa that meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the California Environmental Quality Act Guidelines; and
- Taxa that are planning species under the MSHCP subunits that occur within the Project area and/or have applicable survey areas and methodology per the MSHCP.

The habitat assessment began with a historical literature and database review, which started with the Riverside County Integrated Project Conservation Summary Report Generator (RCIP 2016) to determine which special-status plant species should be included in the habitat assessment per the terms and conditions of the MSHCP.

2.5.1 Historical Literature and Database Review

Prior to the field analysis, the BRTR was reviewed to determine the extent and location of special-status species and vegetation communities observed during the 2008 habitat assessment and focused rare plant surveys (Power Engineers, Inc. 2010). Additionally, species occurrences from the CDFW California Natural Diversity Database (CNDDB) RareFind3 (CDFW 2016) and the CNPS Online Inventory of Rare and Endangered Plants (CNPS 2016) were queried for the U.S. Geological Survey (USGS) topographic quadrangles wherein the Project lies. The Corona North 7.5-minute USGS topographic quadrangle was



used as the center of a nine-quad search of the CNPS database, and the Project alignment was used as the center of the 15-mile-radius query within the CNDDB database to determine which special-status plant species needed analysis for potential occurrence within the Rare Plant Survey Area.

The CNDDB and CNPS research produced a list of special-status plants known to occur within the aforementioned search parameters, including federally endangered or threatened species, state-endangered or threatened species, and species on the CNPS California Rare Plant Rank (CRPR) Lists 1 through 4.

The CNPS is a nongovernmental agency that uses a system of organization based upon scientific research to study the rarity of particular species. The CNPS has created effort hierarchy to rank plant species in terms of degrees of conservation concern (CNPS 2016).

As the entire Project falls within the MSHCP, the list of Covered Species was also consulted (RCIP 2004).

To summarize, GIS data on special-status plants were derived and consulted from the following sources:

- CDFW CNDDB (accessed online June 2016);
- CNPS Rare Plant Inventory (accessed online June 2016)
- Riverside County Transportation and Land Management Agency County Wide Geographical Information Systems Data Layers (accessed online June 2016).

Based on the review of these sources, a list of potentially occurring special-status plants was prepared for the Project (Appendix A).

2.5.2 Field Analysis for Vegetation Communities and Potentially Occurring Rare Plants

AECOM botanists Jonathan Dunn and Jenna Hartsook conducted a fairly comprehensive field survey composed of a pedestrian assessment in late June 2016. Areas not accessible (such as inundated areas or areas with dense vegetation) were assessed from an adjacent area using binoculars to document the vegetation communities present. Prior to and during the field analysis, the botanists used aerial field maps to determine which areas within the Rare Plant Survey Area could be excluded from the habitat assessment. Clearly developed areas were omitted from the field habitat assessment and those areas currently or historically used for crop cultivation were considered unsuitable for all species being evaluated. The surveys were intended to assess habitat suitability for each of the special-status plant species with the potential to occur in the Rare Plant Survey Area as well as to determine the vegetation communities within 500 feet of each Project component. The habitat suitability assessment did not constitute a protocol-level presence/absence survey; however, if a special-status species was observed during the field effort, its presence was recorded as an incidental observation.



The Riverside County Integrated Project (RCIP) Conservation Summary Report Generator was accessed in June 2016 to determine focused survey requirements for the Assessors Parcels represented by the RTRP. The Summary Report determined that habitat assessments (and potential focused surveys) were required for three Narrow Endemic Plant Species: San Diego ambrosia, Brand's Phacelia, and San Miguel savory.

The June 2016 habitat assessment was generally performed outside of the peak blooming season for most early spring and summer annual plant species. Additionally, a combination of unseasonably warm weather and the location of the Project in an area that is dry and hot relative to other suitable areas within the range of these species would have desiccated any existing populations to an unrecognizable state. Therefore, detectability of most plant species was limited. In addition, due to the reconnaissance level effort of the assessment, it is understood that more plant species than detected could be present within the Rare Plant Survey Area. Data were collected using hand-held global positioning system (GPS) units, photographs, and aerial field maps.

2.5.3 Rare Plant Potential for Occurrence

The special-status plant species that have the potential to occur in the Rare Plant Survey Area are tabulated in Appendix A. This table lists the special-status plant species yielded by the literature and database review discussed in Section 2.5.1, describes their status and habitat requirements, and designates a ranking for their potential to occur within the various areas of the Rare Plant Survey Area. Ranking for their potential to occur was based upon the plant communities observed in the field, observed soil and habitat conditions, and professional expertise. The potential for occurrence ranking criteria are as follows:

- <u>Present</u> The species and/or conclusive sign was observed on-site during the survey.
- <u>High likelihood to occur</u> Suitable habitat for the species is present and ecological conditions are favorable for its occurrence. Recent nearby occurrences for the species have been recorded (in the last decade).
- <u>Moderate likelihood to occur</u> Suitable habitat for the species is present; however, ecological conditions are only moderately favorable for its occurrence.
- Low likelihood to occur Only a minimal amount of suitable habitat for the species is present and the habitat may be of marginal quality. Ecological conditions are likely not favorable for its occurrence.
- Not likely to occur No suitable habitat for the species is present.

2.5.4 Focused Survey for San Diego Ambrosia

A focused survey for San Diego ambrosia was conducted within the proposed impact areas as this was the only rare plant species of the three identified as target species by the RCIP



and CPUC (see page 1 of this report) that would be recognizable this time of year. The surveys were pedestrian in nature and included transects were spaced approximately 5 meters apart to ensure 100 percent coverage of the impact areas.

2.5.5 <u>Vegetation Community Mapping</u>

Vegetation within 500 feet of each Project component was mapped through photointerpretation as informed by field reconnaissance. Field ecologists were equipped with a portable GIS-enabled field computer, which allowed for the notation of key features and species composition in the field. Photo-interpretation was conducted over National Agriculture Imagery Program imagery (NAIP 2014). Final feature creation and map attribution were completed in a controlled office environment. Feature digitization was conducted at a viewing scale no finer than 1:1,000 (approximately 1" = 100') to provide consistent results throughout the mapping area. The minimum mapping unit was 1 acre. All vegetation features were assigned to Manual of California Vegetation (MCV) alliances.

3.0 RESULTS AND DISCUSSION

3.1 Riparian Bird Habitat Assessment

A total of 187.94 acres of suitable habitat for least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo were mapped and characterized within the Riparian Bird Survey Area (Figure 3), with a linear survey route of approximately 11.5 kilometers. These portions of the Project exhibit contiguous spans of primarily mature riparian habitat dominated by Goodding's black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), and Freemont cottonwood (*Populus freemontii*) and were considered capable of supporting the target species. Small patches of early seral riparian habitat or riparian scrub sparsely dominated by mule fat (*Baccharis salicifolia*), which were disconnected from more mature riparian areas, were considered unsuitable due to the lack of cover and protection offered for nesting and roosting birds.

3.2 Small Mammal Habitat Assessment

Various types of human disturbances are common along all sections of the Project alignment and include cultivated fields, dairies, graded lands, residential housing areas, areas in the process of being developed, a golf course, highways and local heavily used roads, bridges, and extensive homeless encampments. The western (north-south) segment is essentially entirely disturbed, primarily by cultivated fields, residential developments, and a dairy, and no habitats suitable for the three target species occur in this part of the Project alignment. In contrast, the southern (east-west) segment exhibits extensive areas of development (residential, golf course) at its western end, but also extensive stands of less disturbed habitats in the form of well-developed stands of riparian woodland and riparian scrub vegetation, isolated patches of scrub vegetation, and expansive areas of disturbed annual grasslands to the east.



Soil conditions in the southern segment vary from pure sand in the Santa Ana River system to sandy loams away from the river floodplain. Riparian vegetation occurs along the Santa Ana River and in occasional side drainages, while most patches of scrub habitat are small and of low quality due to the long history of human disturbances throughout this area.

The potential for SBKR and LAPM primarily occurs in the sandy Santa Ana River floodplain habitats, whereas SDPM would be expected at the edges of the Santa Ana River and in adjacent scrub and scrub-grassland habitats. The areas (polygons) shown in Figure 4 exhibit potentially suitable conditions for one or more of the three target species and will serve as the study area for subsequent trapping to confirm presence/absence of SBKR, LAPM, and SDPM. It should be noted that human disturbances in a trapping area, such as the trash-filled homeless encampments, may preclude a species from utilizing the area. The effects from encampments on presence/absence will be evaluated during the trapping sessions. A total of 53.35 acres of suitable habitat should be trapped for the three target species.

3.3 Delhi Sands Flower-loving Fly Habitat Assessment

The distribution of Delhi sands soils on undeveloped lands within the DSFLF Survey Area (i.e., habitat ratings 2–5 described in Section 2.4) are restricted to a few discontinuous areas extending from the north side of Limonite Avenue to immediately north of Cantu-Galleano Ranch Road (Figures 5–5d). For reference, each of these discontinuous, discrete areas identified as representing suitable habitat for DSFLF are numbered 1 through 4 (with subparts of area 2) as follows with their approximate acreages: Area 1 of 0.9 acre is located on the north side of Limonite Avenue; Area 2a of 4.63 acres is located on the south side of Landon Drive; Area 2b of 1.5 acres is located at the southwestern intersection of Landon Drive and Wineville Avenue; Area 3 of 35.69 acres is located on the northwestern intersection of Wineville Avenue and Cantu-Galleano Ranch Road; and Area 4 (the southernmost marshalling yard) of 5.42 acres is located northwest of the intersection of Cantu-Galleano Ranch Road and Etiwanda Avenue. The total combined acreage of these areas is 48.14 acres.

Area 1 is located north of and adjacent to Limonite Avenue (just east of Interstate 15) (Figure 5a). The majority of this undeveloped site (northerly portions) is situated in an active agricultural field, in use at least since 1994 (Google Earth). These agricultural portions of the site are Unsuitable for DSFLF. A small southern edge of this site exhibits abundant Delhi sands and sand-associated insects (*Bembix* are abundant) and plants (*Verbesina*) and is sufficiently undisturbed so as to constitute suitable DSFLF habitat of moderate to low quality.

Area 2 is a series of discontinuous patches of sand deposits along the south side of Landon Drive (Figure 5b) that have been left fallow after a history of agricultural use. Small patches of soils mapped as Delhi sands (Knecht 1971) constitute the portions representing DSFLF habitat (Figures 2a and 2b), including a sandy area not formally mapped by Knecht



(whereas the remaining majority of these lands have fine, slightly alkaline, silty soils). Current conditions through these areas range from low to high quality DSFLF habitat.

Area 3, located northwest of the intersection of Wineville Avenue and Cantu-Galleano Ranch Road (Figure 5c), also represents a site left fallow after a history of agricultural use. Though portions appear to be disked on an annual basis, a small fragment of remnant dune along the roadside remains essentially unchanged since the previous DSFLF surveys were undertaken in 2010 and 2011 (Osborne 2011). Conditions on the site rate as moderate quality DSFLF habitat.

Area 4 on the west side of Etiwanda Avenue (Figure 5d) is an open field without any recent agricultural use, though it is subject to disking. Vegetation and disked soils indicate moderate quality DSFLF habitat.

Undeveloped land along the eastern side of Wineville Avenue from Landon Drive to Cantu-Galleano Ranch Road has a southern portion (previously identified as suitable DSFLF habitat [Osborne 2010, 2011]) that was recently developed for residential housing. The majority of the northern portion of this land continues to be used for active dairy operations (Osborne 2010), rendering the land unsuitable for DSFLF.

Much of the Project extends through extensive areas of undeveloped lands along the Santa Ana River. Though these riverine soils are often sandy, they are alluvial sands with an associated high water table, and represent conditions unsuitable for DSFLF.

Table 1 provides a summary of the habitat ratings for potential to support DSFLF, along with brief explanations of the conditions substantiating the rating.

Survey Area	Habitat for DSF	Justification
1	Low Quality	A small area with relatively undisturbed Delhi sands dune formation with vegetation dominated by <i>Verbesina</i> , but majority of area heavily disked and mixed with organic materials such as manure. Vegetation dominated by annual grasses and <i>Amaranthus</i> . Very small area in extent, long surrounded by unsuitable conditions, renders the site as low quality habitat.
2a	Moderate to High Quality	History of disking, vegetation of exotic annual grasslands with <i>Verbesina</i> , <i>Heterotheca</i> , and <i>Artemisia</i> in some areas. Very sandy.

Table 1 Rating of DSFLF Habitat Quality



Survey Area	Habitat for DSF	Justification
2b	Low to Moderate Quality	History of disking, vegetation of exotic annual grasslands. Sands appear overly fine and semi-alkaline.
3	Moderate Quality	History of disking, vegetation of exotic annual grasslands with <i>Verbesina</i> (and likely other sand associated plants on portions). Portions of relictual dune.
4	Moderate Quality	Large field with extensive sandy soils. Sand- associated plants.
Dairy	Unsuitable	Heavily disturbed; wet, irrigated pastures; cattle pens; developed; and landscaping.

3.4 Rare Plants Habitat Assessment

The habitat assessment for special-status plants was conducted within the Rare Plant Survey Area in late June 2016. The bulk of the Project falls within Narrow Endemic Plant Species Survey Area (NEPSSA) 7 of the MSHCP, while the Clay Street and Etiwanda Avenue marshalling yards fall outside any NEPSSA. The Clay Street marshalling yard is a formerly developed site and is largely paved while the Etiwanda Avenue yard appears to have been in agricultural use since the mid-1960s. The habitat assessment determined that no special-status plants are expected to occur within either marshalling yard based on existing conditions, the lack of suitable habitat, and historic land uses. These marshalling yards will not be discussed further in this section.

3.4.1 Rare Plant Potential for Occurrence

This section contains discussions of the potential for occurrence of special-status plant species within the Project area.

The Project area supports both upland and riparian habitats. The upland habitats consist largely of lands impacted by current and historic agricultural activities. These areas are overwhelmingly dominated by nonnative plant species. While these agricultural impacts do not preclude the possibility of the presence of special-status plant species, they do significantly reduce the likelihood of such occurrences and most especially so for perennial plant species. The agricultural impacts appear of two basic types, intensive and passive. Intensive farming on the relatively level portions of the Rare Plant Survey Area can be characterized by repeated tilling and disking. Passive agricultural practices include grazing and other activities, which do not necessarily disturb the soil profile or native seed bank. Within the Rare Plant Survey Area, these historic passive agricultural areas are typically on slopes that were impractical for intensive agriculture. While these areas are still largely dominated by nonnative species, relictual populations of native shrubs and herbs persist in these areas. Upland habitats in the Rare Plant Survey Area also support several patches of



native scrub vegetation. Riparian habitats within the Rare Plant Survey Area are found within the banks of the Santa Ana River and several tertiary drainages feeding into the river.

A total of 57 rare plant species have been documented within the vicinity of the Project (CDFW 2016; CNPS 2016). Of those 57 rare plant species, nine species were determined to have some potential to occur within the Rare Plant Survey Area based on the habitat assessment. These nine species have been highlighted within the Potential to Occur table located in Appendix A, Table 1. The remaining 48 species were considered unlikely to occur based on the known range of the species or the lack of suitable habitat. These species are listed in Appendix A, Table 2.

The habitat assessments conducted in June 2016 determined that suitable habitat for San Diego ambrosia and Brand's phacelia exists within the Rare Plant Survey Area, and that no suitable habitat for San Miguel savory is present.

3.4.2 Focused Survey for San Diego Ambrosia

During the June 2016 focused survey for San Diego ambrosia, no individuals were observed within or directly adjacent to the proposed impact areas.

3.4.3 Rare Plant Species Incidental Observations

During the June 2016 habitat assessment, a single rare species, Southern California black walnut (*Juglans californica*) (CNPS CRPR 4.2), was observed in the Rare Plant Survey Area, adjacent to structure AX15 (Figure 6).

3.4.4 Vegetation Community Mapping

Ten vegetation communities were mapped within 500 feet of each Project component. Each vegetation community is listed and described below. Figure 6 depicts the extent of each community within 500 feet of the Project components.

Fremont Cottonwood Forest

Populus fremontii Alliance

All habitats within the floodplain of the Santa Ana River coincident with the 500-foot buffer around the Project components have been assigned to the *Populus fremontii* Alliance. This alliance is recognized by its relative dominance of *Populus fremontii* within the vegetation stand; however, numerous other riparian tree species are also represented within this habitat, including *Platanus racemosa*, *Salix laevigata*, and several other *Salix* species. *Vitis californica* is common in the understory, as is the nonnative *Verbesina encelioides*. These riparian habitats are complex and dynamic with species dominance shifting based on seasonal flooding and scouring. Localized within this mapping unit are recognizable small areas supporting other MCV classifications, such as *Salix exigua* Alliance, *Baccharis salicifolia* Alliance, *Toxicodendron diversilobum* Alliance, and *Typha latifolia* Alliance, as well as areas recently cleared through management actions that supported *Arundo donax* Semi-



Natural Herbaceous Stands. These areas have been mapped in aggregate as *Populus fremontii* Alliance as they are smaller than the minimum mapping unit of 1 acre.

Coast Live Oak Woodland

Quercus agrifolia Alliance

A single small patch of upland woodland supporting *Quercus agrifolia*, *Sambucus nigra* subsp. *caerulea*, *Juglans californica* (CNPS CRPR 4.2), and *Vitis californica* was assigned to *Quercus agrifolia* Alliance.

California Sagebrush-California Buckwheat Scrub

Artemisia californica-Eriogonum fasciculatum Alliance

Despite extensive historical disturbance activities (disking, grazing, etc.) throughout the Santa Ana River watershed, native shrublands persist in several areas within 500 feet of the Project components. *Artemisia californica-Eriogonum fasciculatum* Alliance is characterized by the presence of the two eponymous species, as well as other native shrubs and cacti, including *Malosma laurina*, *Hazardia squarrosa*, and *Cylindropuntia californica*. Much this habitat is highly disturbed and exhibits significant cover of nonnative species, such as *Hirschfeldia incana*, *Centaurea melitensis*, and *Bromus madritensis*. Within the 500 feet of the Project components this alliance is found primarily on slopes likely unsuitable for intensive agriculture.

Palmers Goldenbush Scrub

Ericameria palmeri Provisional Alliance

Within 500 feet of the Project components, *Ericameria palmeri* Provisional Alliance is quite similar in species composition and distribution to the *Artemisia californica-Eriogonum fasciculatum* Alliance described above with the inclusion and often dominance of *Ericameria palmeri* var. *pachylepis*. This alliance occurs on slopes 500 feet of the Project components near the end of Jurupa Avenue.

Annual Brome Grasslands

Bromus (*diandrus*, *hordeaceus*)-*Brachypodium distachyon* Semi-natural Herbaceous Stands

Extensive areas 500 feet of the Project components have been impacted by historic agricultural activities and are dominated by a suite of nonnative grass and forb species, including *Bromus diandrus*, *Hordeum murinum*, *Sisymbrium orientale*, *Salsola tragus*, and *Chenopodium* species. This highly disturbed habitat also supports scattered nonnative trees and shrubs, including *Schinus molle* and *Nicotiana glauca*, and occasional fragments of *Artemisia californica-Eriogonum fasciculatum* Alliance smaller than a minimum mapping unit. Collectively, these habitats have been mapped as *Bromus* (*diandrus*, *hordeaceus*)-*Brachypodium distachyon* Semi-natural Herbaceous Stands.



Other Cover Types

Developed

This cover type includes roadways, homes, businesses, parks, cemeteries, and similar developed lands, including their associated landscape plantings.

Active Agriculture

This cover type includes dairies and livestock feed yards or areas that have been tilled and used as croplands or groves/orchards.

Barren-Not Developed

This cover type includes areas devoid of vegetation due to clearing, grading, or other human activity.

Ornamental/Landscaped

This cover type includes vegetation planted and maintained for human aesthetic value, typically in proximity to developed areas.

Open Water

This cover type includes unvegetated naturally occurring waterbodies including streams, lakes, etc.

4.0 **RECOMMENDATIONS**

4.1 Riparian Birds

It is recommended that focused surveys for all three riparian bird species be conducted within the 188 acres of designated suitable habitat in the spring and summer of 2016. Surveys should be conducted by qualified, permitted biologists following the USFWS guidelines for least Bell's vireo (USFWS 2001) and southwestern willow flycatcher (USFWS 2000), and *A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo: U.S. Fish and Wildlife Techniques and Methods* (Halterman et al. 2015) for yellow-billed cuckoo.

4.2 Small Mammals

It is recommended that trapping for all three small mammal species be conducted within the 32.2 acres of designated suitable habitat in the summer of 2016; however, it should be noted that one of the areas identified as suitable cannot be trapped due to recent sightings of an active and aggressive mountain lion. This area is located just east of where the Santa Ana River crosses the alignment, north of California Avenue (Figure 4). Trapping should be conducted by permitted biologists and follow the basic protocols established for SBKR and Species of Special Concern as described below.



Trap lines will be run for 5 consecutive nights, with traps remaining in the same locations. Trapping will only occur during periods when nighttime air temperatures are above or only slightly below 50 degrees Fahrenheit. Although midnight trap checks are normally required for these surveys, they will not be applied during the proposed survey, due to concerns for the safety of the trappers in the Project area (see Special Trapping Conditions below). However, because nighttime temperatures during the trapping effort are projected to be warm, the potential for harm to trapped animals will be eliminated.

The configuration of trap lines and/or trap groups will depend on the characteristics and size of each specific trapping locality. In general, however, traps will be set in lines and at approximately 7-meter intervals. Where appropriate, small groups of traps may be set at small sites versus in lines. The number of traps to be covered by each biologist each night will depend on the time required to access and check traps at each set of habitat polygons. Most polygons are separated by varying distances, and time is required to transit between polygons, thereby consuming extra time to complete each trapping session. It is expected that each biologist will be able to cover 150 to 180 traps per night.

The number of trapping sessions required to cover all mapped habitat polygons is projected to be four. Transects targeting SBKR and LAPM will be placed in microhabitats considered to be those most likely to yield these species, and will include relatively sparsely vegetated sites exhibiting sandy to sandy-loam substrates and a minimal component of rock. Transects targeting SDPM will be placed in areas exhibiting sage scrub cover and areas containing rock-outcrops and loamy soils. Only disinfected 12-inch modified Sherman collapsible live-traps will be used in this survey. Traps will be set at dusk each day and baited with a mixture of bird seed. Traps will be checked and closed the following morning.

All animals will be identified to species and released at the point of capture. Animals may be marked using nontoxic markers to identify any new animals captured over the 5-day trapping session. Field notes and photographs will be taken to document habitat conditions in trapping areas. Representative weather conditions at the time of the trapping study also will be noted.

Special Trapping Conditions

Homeless encampments are common in the well-developed riparian woodland along the Santa Ana River, in the eastern part of the Project alignment, but also possibly along the Santa Ana River to the east of the golf course. The Riverside County Sheriff's Department recommended that trap checks not be conducted during the night, especially in the vicinity of homeless encampments due to their inability to guarantee the safety of the biologists. At least three areas of interest coincide with large homeless camps. It also was recommended that two trappers be in close physical proximity during each baiting and trap closure each day. Due to the statements of the Sheriff's Department, night-time checks will not be conducted during the proposed trapping effort.



4.3 Delhi Sands Flower-loving Fly

It is recommended that focused surveys be conducted for DSFLF within the 42.63 acres of identified suitable habitat in the summer and fall of 2016, then again during the same time period in 2018 (2-year survey according to protocol). Surveys should be conducted by a permitted biologist according to the *Guidelines for Conducting Presence/Absence Surveys for the Delhi Sands Flower-loving Fly* (USFWS 1996.

4.4 Rare Plants

It is recommended that focused surveys for the species listed in Appendix A, Table 1 be conducted in the spring of 2017 by qualified botanists with experience in the identification of species and botanical phenology within the Project vicinity. Focused surveys should follow accepted protocol such as the *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009). Species listed in Appendix A, Table 2 were considered during this analysis but are not likely to occur within or adjacent to the Project alignment and no focused surveys are recommended. Focused rare plant surveys in upland habitats should be concentrated on passive agricultural areas as well as native scrub.



REFERENCES

- Ballmer, G. R. 1989. Petition to the U. S. Fish and Wildlife Service to list *Rhaphiomidas terminatus abdominalis* as endangered. Submitted to USFWS October 18, 1989. 11 pp.
- California Department of Fish and Game (CDFG). 2009. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*. November 24.
- California Department of Fish and Wildlife (CDFW). 2016. California Department of Fish and Game. RareFind 3 computer program. California Natural Diversity Database (CNDDB) Search. California Department of Fish and Game, State of California Resources Agency. Sacramento, California. Available at http://www.dfg.ca.gov/ biogeodata/cnddb/mapsanddata.asp [accessed May 2016].
- California Native Plant Society (CNPS), Rare Plant Program. 2016. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Available at http://www.rareplants.cnps.org [accessed May 2016].
- Halterman, M., M. J. Johnson, J. A. Holmes, and S. A. Laymon. 2015. A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo: U.S. Fish and Wildlife Techniques and Methods, 45 pp.
- Knecht, A. A. 1971. *Soil survey of western Riverside area, California.* U.S. Department of Agriculture, Soil Conservation Service.
- Osborne, K. H. 2003. *Delhi Sands Flower-loving fly Habitat Assessment for the Hermosa Cemetery, Colton.* Prepared for Inland Memorial Cremations and Burial. Submitted to the U.S. Fish and Wildlife Service, CA.
- Osborne, K. H., G. R. Ballmer, and T. McGill. 2003. *DSF Habitat Assessment for the Proposed Mary Vagle Conservation Area.* Prepared for the City of Fontana. Submitted to the U.S. Fish and Wildlife Service, CA.
- Osborne, K. H. 2010. Focused Survey for Delhi Sands Giant Flower-loving Fly (Rhaphiomidas terminatus abdominalis) on a Portion of the Riverside Transmission Reliability Project, Riverside County, California. Submitted to USFWS, Carlsbad, November.
- Osborne, K. H. 2011. Second Year Focused Survey for Delhi Sands Giant Flower-loving Fly (Rhaphiomidas terminatus abdominalis) on a Portion of the Riverside Transmission Reliability Project, Riverside County, California. Submitted to USFWS, Carlsbad, September.



- Power Engineers, Inc. 2010. *Riverside Transmission Reliability Project Biological Resources Technical Report*. Prepared for Riverside Public Utilities. June.
- Riverside County Integrated Project (RCIP). 2002. Mammals of Western Riverside County. MSHCP Species Account, Volume II-B, *Mammals*, November 2002 Draft MSHCP.
- Riverside County Integrated Project (RCIP). 2004. Multiple Species Habitat Conservation Plan (MSHCP), March.
- Riverside County Integrated Project (RCIP). 2016. Riverside County Integrated Plan Online Conservation Report Generator. Available at http://www.rctlma.org/online/content/ rcip_report_generator.aspx [accessed June 2016].
- U.S. Department of Agriculture (USDA) National Agriculture Imagery Program (NAIP). 2014. Aerial Imagery. Available at http://www.fsa.usda.gov/programs-and-services/aerialphotography/imagery-programs/naip-imagery/ [accessed February 2016].
- U.S. Fish and Wildlife Service. 1996. *Delhi Sands Flower-loving Fly Draft Presence/Absence Survey Guidelines*. December 30.
- U.S. Fish and Wildlife Service. 2000. *Southwestern Willow Flycatcher Protocol Revision*. Available at https://www.fws.gov/pacific/ecoservices/endangered/recovery/ documents/SWWFlycatcher.2000.protocol.pdf_
- U.S. Fish and Wildlife Service. 2001. *Least Bell's Vireo Survey Guidelines*. January 19, 2001. Available at https://www.fws.gov/pacific/ecoservices/endangered/recovery/ documents/LBVireo.2001.protocol.pdf.

Sincerely, Dallas Pugh

Senior Biologist

Attachments: Figures Appendix A – Special-status Plant Species Documented or with Potential to Occur Within the Rare Plant Survey Area FIGURES



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015\60337535_SCE_On-Call\60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920 GIS\922_Maps\Reports\Fig1_RTRP_Regional.mxd, 7/26/2016, daniel_arellano,

Regional Map



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015\60337535_SCE_On-Call\60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920 GIS\922_Maps\Reports\Fig2_Vicinty.mxd, 7/26/2016, daniel_arellano Vicinity Map



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015\60337535_SCE_On-Call\60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920 GIS\922_Maps\Reports\Fig3_RiparianBirdHabitat.mxd, 7/26/2016, daniel_arellano **Riparian Bird Habitat Assessment Results**



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015/60337535_SCE_On-Call/60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920 GIS\922_Maps\Reports\Fig4_SmallMammalHabitat.mxd, 7/26/2016, daniel_arellano Small Mammal Habitat Assessment Results



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015\60337535_SCE_On-Call\60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920_GIS\922_Maps\Reports\Fig5_DSFLFHabitat.mxd, 7/26/2016, daniel_arellano



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015\60337535_SCE_On-Call\60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920 GIS\922_Maps\Reports\Fig5a_DSFLFHabitat.mxd, 7/26/2016, daniel_arellano

Delhi Sands Flower-loving Fly Habitat Assessment Results - Area 1



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015\60337535_SCE_On-Call\60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920 GIS\922_Maps\Reports\Fig5b_DSFLFHabitat.mxd, 7/26/2016, daniel_arellano

Delhi Sands Flower-loving Fly Habitat Assessment Results - Areas 2a and 2b



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015\60337535_SCE_On-Call\60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920 GIS\922_Maps\Reports\Fig5c_DSFLFHabitat.mxd, 7/26/2016, daniel_arellano



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015\60337535_SCE_On-Call\60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920 GIS\922_Maps\Reports\Fig5d_DSFLFHabitat.mxd, 7/26/2016, daniel_arellano



CWA 16 RiversideTransmission Reliability Project Jurupa Valley SSS Habitat Assessment Report Path: P:\2015\60337535_SCE_On-Call\60504072_CWA16_RTRP_Jurupa_Valley_SSS\900-CAD-GIS\920 GIS\922_Maps\Reports\Fig6_Vegetation.mxd, 7/26/2016, daniel_arellano

Figure 6 **Vegetation Map**

APPENDIX A

SPECIAL-STATUS PLANT SPECIES DOCUMENTED OR WITH POTENTIAL TO OCCUR WITHIN THE RARE PLANT SURVEY AREA

Table 1. Special-Status Plant Species with Potential to Occur within or Directly Adjacent to the Project Impact Areas

Common and Scientific Names	Sensitivity Status	Blooming Period	Preferred Habitat, and Potential for Occurrence
San Diego	FE	April - October	Occurs in open floodplain terraces and slopes on sandy, loam, and clay soils.
Ambrosia Ambrosia pumila	CRPR: 1B.1 MSHCP: NEPS		RTRP: Suitable habitat is present in uplands exclusive of historic intensive agriculture areas. Moderate likelihood to occur.
,			Clay St. Marshalling Yard: Not likely occur due to level of disturbance. Site assessment was conducted during the known blooming season for this species and the species was not observed.
			<i>Etiwanda Ave. Marshalling Yard:</i> Not likely occur due to level of disturbance. Site assessment was conducted during the known blooming season for this species and the species was not observed.
Smooth Tarplant	CRPR: 1B.1 MSHCP: CAPS	April-September	Occurs in alkali meadow or alkali scrub within valley and foothill grasslands, meadows, playas or riparian woodland. 0 - 480 meters
Centromadia pungens ssp.			RTRP: Suitable habitat is present in riparian areas. High likelihood to occur.
laevis			Clay St. Marshalling Yard: Not likely occur due to lack of suitable habitat.
			Etiwanda Ave. Marshalling Yard: Not likely occur due to lack of suitable habitat.
Long-Spined	CRPR: 1B.2	April-July	Occurs in primarily on clay soils within chaparral, coastal scrub, meadows, valley/foothill grasslands.
Spineflower Chorizanthe			RTRP: Suitable habitat is present in occurs areas of Altamont and Porterville clay soils. Moderate likelihood to occur.
polygonoides var. longispina			Clay St. Marshalling Yard: Not likely occur due to lack of suitable habitat.
C .			Etiwanda Ave. Marshalling Yard: Not likely occur due to lack of suitable habitat.
San Miguel	CRPR: 1B.1 MSHCP: NEPS	March - July	Restricted to gabbroic and metavolcanic soils within chaparral, coastal scrub, meadows, valley/foothill grasslands.
Clinopodium chandleri			RTRP: Suitable soils absent. Not likely to occur.
			Clay St. Marshalling Yard: Not likely occur due to lack of suitable habitat.
			Etiwanda Ave. Marshalling Yard: Not likely occur due to lack of suitable habitat.
Paniculate	CRPR: 4.2	March - November	Occurs in primarily on clay soils within chaparral, coastal scrub, meadows, valley/foothill grasslands.
Tarplant Deinandra paniculata			RTRP: Suitable habitat is present in occurs areas of Altamont and Porterville clay soils. Moderate likelihood to occur.
,			Clay St. Marshalling Yard: Not likely occur due to lack of suitable habitat.
			Etiwanda Ave. Marshalling Yard: Not likely occur due to lack of suitable habitat.

Common and Scientific Names	Sensitivity Status	Blooming Period	Preferred Habitat, and Potential for Occurrence		
Many-Stemmed Dudleya	CRPR: 1B.2 MSHCP: NEPS	April-July	Occurs in heavy clay soils or grassy slopes in barrens, rocky places, and ridgelines chaparral, sage scrub and, valley/foothill grasslands. 15 - 790 meters		
Dudleya multicaulis			RTRP: Suitable habitat is present in occurs areas of Altamont and Porterville clay soils. Moderate likelihood to occur.		
			Clay St. Marshalling Yard: Not likely occur due to lack of suitable habitat.		
			Etiwanda Ave. Marshalling Yard: Not likely occur due to lack of suitable habitat.		
Santa Ana River woollystar	FE CE	April - September	Occurs on sandy and gravelly soils with riparian habitats and alluvial margins. Populations recorded within 4 miles of the study area (CNDDB PDPLMO3035).		
Eriastrum densifolium ssp. Sanctorum	CRPR: 1B.1		RTRP: Suitable habitat is present within in riparian areas and alluvial margins – notably in areas of recent Arundo donax removal. High likelihood to occur.		
			Clay St. Marshalling Yard: Not likely occur due to lack of suitable habitat.		
			Etiwanda Ave. Marshalling Yard: Not likely occur due to lack of suitable habitat.		
Southern	CRPR: 4.2	March - August	Occurs in mixed woodland habitats.		
California black walnut Juglans californica	MSHCP: CAPS		RTRP: The species is known to occur adjacent AX21. Species detected during site assessments surveys.		
			Clay St. Marshalling Yard: Species does not occur. Not detected during site assessments surveys. Conspicuous species- detection would have been expected if present.		
			Etiwanda Ave. Marshalling Yard: Species does not occur. Not detected during site assessments surveys. Conspicuous species- detection would have been expected if present.		
Brand's star phacelia	CRPR: 1B.1 MSHCP: NEPS	March - June	Occurs locally on sandy alluvial margins. Populations recorded within 2.5 miles of the study area (CNDDB PDHYDOC510).		
Phacelia stellaris			RTRP: Suitable habitat is present along alluvial margins of the Santa Ana River. High likelihood to occur.		
			Clay St. Marshalling Yard: Not likely occur due to lack of suitable habitat.		
			Etiwanda Ave. Marshalling Yard: Not likely occur due to lack of suitable habitat.		

Table 2. Additional Species Considered Based on Nine-Quad CNPS Search but not Included due toLack of Suitable Habitat within the Study Area or Known Range of Species

Scientific Name	Common Name	Sensitivity Status
Abronia villosa var. aurita	chaparral sand-verbena	1B.1
Allium munzii	Munz's onion	FE/CT/1B.1
Astragalus brauntonii	Braunton's milk-vetch	FE/1B.1
Atriplex coulteri	Coulter's saltbush	1B.2
Baccharis malibuensis	Malibu baccharis	1B.1
Berberis nevinii	Nevin's barberry	FE/CE/1B.1
Calandrinia breweri	Brewer's calandrinia	4.2
California macrophylla	round-leaved filaree	1B.2
Calochortus catalinae	Catalina mariposa lily	4.2
Calochortus plummerae	Plummer's mariposa lily	4.2
Calochortus weedii var. intermedius	intermediate mariposa lily	1B.2
Calystegia felix	lucky morning-glory	3.1
Camissoniopsis lewisii	Lewis' evening-primrose	3
Caulanthus simulans	Payson's jewelflower	4.2
Chorizanthe leptotheca	Peninsular spineflower	4.2
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	FC/CE/1B.1
Chorizanthe parryi var. parryi	Parry's spineflower	1B.1
Chorizanthe xanti var. leucotheca	white-bracted spineflower	1B.2
Cladium californicum	California sawgrass	2B.2
Convolvulus simulans	small-flowered morning-glory	4.2
Dodecahema leptoceras	slender-horned spineflower	FE/CE/1B.1
Harpagonella palmeri	Palmer's grapplinghook	4.2
Hesperocyparis forbesii	Tecate cypress	1B.1

Scientific Name	Common Name	Sensitivity Status
Hordeum intercedens	vernal barley	3.2
Horkelia cuneata var. puberula	mesa horkelia	1B.1
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	1B.1
Lepechinia cardiophylla	heart-leaved pitcher sage	1B.2
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	4.3
Lilium humboldtii ssp. ocellatum	ocellated Humboldt lily	4.2
Microseris douglasii ssp. platycarpha	small-flowered microseris	4.2
Mimulus diffusus	Palomar monkeyflower	4.3
Monardella australis ssp. jokerstii	Jokerst's monardella	1B.1
Monardella hypoleuca ssp. intermedia	intermediate monardella	1B.3
Monardella pringlei	Pringle's monardella	1A
Muhlenbergia californica	California muhly	4.3
Navarretia prostrata	prostrate vernal pool navarretia	1B.1
Nolina cismontana	chaparral nolina	1B.2
Penstemon californicus	California beardtongue	1B.2
Pentachaeta aurea ssp. allenii	Allen's pentachaeta	1B.1
Phacelia keckii	Santiago Peak phacelia	1B.3
Pickeringia montana var. tomentosa	woolly chaparral-pea	4.3
Polygala cornuta var. fishiae	Fish's milkwort	4.3
Pseudognaphalium leucocephalum	white rabbit-tobacco	2B.2
Romneya coulteri	Coulter's matilija poppy	4.2
Senecio aphanactis	chaparral ragwort	2B.2
Sidalcea neomexicana	salt spring checkerbloom	2B.2
Sphenopholis obtusata	prairie wedge grass	2B.2
Symphyotrichum defoliatum	San Bernardino aster	1B.2