Southern California Edison
Environment, Health and Safety
Rosemead, California

Summary of Special-status Biological Resource Investigations Conducted Between 2003-2006 at the Proposed Etiwanda Peaker Project Site

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Table of Contents

1.0 INTRODUCTION . . . . . D- 4

2.0 METHODS . . . . . D- 4

2.1 Vegetation and Sensitive Plant Surveys . . . D- 5

2.2 Sensitive Wildlife Surveys . . . . . D- 5
2.2.1 Small Mammal Trapping . . . . D- 4
2.2.2 Delhi Sands Flower-loving Fly Surveys . D- 4

3.0 RESULTS . . . . . D- 7

3.1 Vegetation Communities and Sensitive Plants . D- 7

3.2 Wildlife Resources . . . . . D- 9
3.2.1 Delhi Sands Flower-loving Fly . . . D- 9
3.2.2 San Diego Horned Lizard. . . . D-10
3.2.3 Small-mammal Trapping Results. . . D-11
3.2.4 San Bernardino Kangaroo Rat . . . D-11
3.2.5 Los Angeles Pocket Mouse. . . . D-12
3.2.6 Burrowing Owl. D-12

4.0 REGULATORY SETTING D-12

4.1 Federal Regulations D-12
4.1.1 Federal Regulation for Waters of the United States, Including Wetlands (Clean Water Act Sections 404 and 401). . . D-13
4.1.2 Federal Policies on Riparian Communities in California D-14
4.1.3 Federal Endangered Species Act . . D-14
4.1.4 Federal Migratory Bird Treaty Act . . D-14
4.1.5 Bald and Golden Eagle Protection Act . D-14

4.2 State Regulations D-14
4.2.1 State Regulation of Waters. . . . D-14
4.2.2 Storm Water Pollution Prevention Plan . D-15
4.2.3 California Endangered Species Act . . D-15
4.2.4 California Fish and Game Code Bird Protections D-15

5.0 RESULTS FOR REGULATORY SETTING. . . . D-16

6.0 POTENTIAL ENVIRONMENTAL IMPACT ANALYSIS . . D-16

7.0 MITIGATION MEASURES D-18

8.0 REFERENCES D-18

APPENDIX

Appendix A. Definitions of California's special-status species

Appendix B. Forensic Entomology Services Letter (September 24, 2006)

List of Figures

Figure 1 **Location of proposed Etiwanda Peaker Project.**

List of Tables

Table 1. **A target species list of rare plants with the potential to occur within the general survey area.**

Table 2. **Vascular plants observed at or near the proposed project site.**

Table 3. **Listed and sensitive wildlife species that may occur on-site or in the general project region because of proximity of the project site to potentially suitable habitat.**

SOUTHERN CALIFORNIA EDISON

Summary of Special-status Biological Resource Studies Conducted at the Proposed Etiwanda Peaker Site

1.0 INTRODUCTION

Southern California Edison (SCE) plans to build a peaker (new small electricity generating unit) northwest of the existing Etiwanda Substation site, east of the 15 Freeway in the City of Etiwanda. The area surrounding the Etiwanda Peaker has been surveyed extensively, as it incorporates the same region as previous SCE proposed projects. Peaker project facilities will be located within an approximate 208 by 308 foot area, inside the boundary for proposed Etiwanda Peaker project site (Figure 1). The main project facilities will include the GE gas turbine generator, an 80-foot tall exhaust stack, a continuous emission monitoring system (CEMS), selective catalytic reduction (SCR) and carbon monoxide reduction system enclosure, an ammonia storage tank (for SCR injection), a gas fuel line, a water line, water storage tanks, transmission transformers, a 66kV transmission tap line, and a facility control module.

This report summarizes the results of several biological resource surveys conducted at the proposed Etiwanda Peaker facility in San Bernardino County over the past several years. The purpose of this assessment is to document and assess the potential and actual occurrence of any special-status plant and wildlife species at the proposed site.

Special-status species are plants and animals that are either listed as endangered or threatened under the Federal or California Endangered Special Acts, listed as rare under the California Native Plant Protection Act, or considered to be rare (but not formally listed) or species of special concern by resource agencies, professional organizations (e.g. Audubon Society, California Native Plant Society (CNPS), The Wildlife Society), and the scientific community (Appendix 1).

2.0 METHODS

The general project site has been reviewed on several occasions for other SCE projects for the presence-absence of special-status resources over the last several years. Each of the past investigations was divided into two phases: pre-fieldwork research (Phase 1) usually followed by field surveys and reporting (Phase 2). Phase 1 included compiling and reviewing existing background information on the natural resources of the site, developing a target species list, and preparing a study plan for fieldwork aimed at determining the presence/absence of sensitive resources. Phase 2 included conducting the necessary fieldwork, reporting on the results, documenting any potential project effects and proposing appropriate mitigation for any expected significant impacts.

Addressed and/or surveyed special-status plants and wildlife species were based on known occurrences in the vicinity of the proposed project location according to California Department of Fish and Game's (CDFG) Natural Diversity Data Base (CNDDB: RareFind2) and Skinner and Pavlik (1994). A recent (Sept 2006) search of the Guasti and Cucamonga Peak 7.5 min USGS

quadrangles on the CNDDB database confirmed that field surveys for the proposed Etiwanda peaker site addressed all species currently listed within and in the vicinity of the project area. Various qualified biologists and sensitive species specialists timed their field surveys to coincide with habitat conditions, and other factors, optimal for detecting specific target species, or habitat features that would reliably predict the likelihood of their occurrence, whenever feasible.

The survey area extends north of 6th Street, east of Interstate 15 and west of Etiwanda Avenue in the City of Rancho Cucamonga, San Bernardino County (Figure 1) and includes approximately 48 acres of mostly disturbed and ruderal vegetation, including areas of abandoned vineyards. The various field surveys included the proposed area for the Etiwanda Peaker site (208 by 308 ft area) and peaker lay down area, plus a buffer of 1000 feet and more in some areas to ensure that biological resources with any potential to occur within the project area are addressed sufficiently.

2.1 Vegetation and Sensitive Plant Surveys

Field reconnaissance visits to the site were conducted between May and July 2003 and in June 2004[1]. The field surveys were conducted on foot throughout the proposed project area, which included the buffer area. Data were collected on the vegetation communities present, their extent within the property boundaries, and on the general flora present. Vegetation and habitat characterizations were mapped onto ortho-rectified aerial photographs of each study area.

Special emphasis was placed on finding the areas or habitat conditions with the highest probability of supporting native vegetation, especially sensitive plant species that might be present. To assist with characterizing the environmental setting, data on plant flowering and vegetation periods were compiled for sensitive and listed plant species with any potential to occur at the proposed project site. The information provided for each identified special-status species, includes: scientific and common (vernacular) names; listing status for Federal and state laws, the CNPS List and Rarity-Endangerment-Distribution (R-E-D) Code, plus the general flowering period and vegetative period by month (Table 1) (Appendix A). This report provides the status, habitat requirements, distribution, and survey results for each special-status species that may be found within the project site based on the presence of suitable habitat.

2.2 Sensitive Wildlife Surveys

Determining the presence or absence of most wildlife species often requires intensive field sampling and observation. Qualified biologists conducted reconnaissance level surveys, concentrating on the habitat types present, according to a standard California vegetation classification system (Sawyer and Keeler-Wolf 1995). Biologists then associated wildlife occurrence with the presence or absence of habitats in order to predict the occurrence of individual wildlife species (Table 3).

A more focused approach was used for sensitive wildlife species with a higher likelihood of occurring on the proposed project location. Phase 1 determined potential habitat for a number of

[1] Site visits were conducted separately by Dr. Dean Wm. Taylor, a rare plant expert/botanist with the Jepson Herbarium/University of California and by David Magney Environmental Consulting. Both were under subcontract to BioResource Consultants, Ojai, CA.

sensitive rodent species, and the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). To better assess the presence or absence of sensitive rodent species, small mammal trapping was conducted in the area that included the Etiwanda Peaker site using live capture traps. Protocol level surveys have been conducted since 2003 for the Delhi Sands flower-loving fly.

2.2.1 Small Mammal Trapping

The Etiwanda peaker area was surveyed from July 5 through 19 of 2003, for the presence of San Bernardino Merriam's kangaroo rat (SBKR), *Dipodomys merriami parvus*. Weather conditions during the survey consisted of clear to partly cloudy skies, daytime temperatures near 40˚C, low nightly temperatures ranging between 17.1 - 28.2˚C, and calm to light breezes. The moon was waning throughout the survey period with illuminations changing from 96-64%, while partly obscured by scattered high clouds through much of each night. Progressively latter moonrise times accounted for at least 2 - 4 hrs of darkness prior to moonrise.

The entire site was traversed on foot by two qualified observers (M.J. O'Farrell and T.M. O'Farrell) to allow for a complete visual assessment. All potential habitat was examined for sign of SBKR. A thorough search was made for diagnostic surface sign of SBKR (i.e., burrows, scat, runways, tracks, dust baths), following the methodology developed by O'Farrell and Uptain (1989) for the Stephens' kangaroo rat. The most open and least disturbed areas were sampled by live trapping. These areas were chosen because they were considered to be the only suitable habitat for SBKR within the vicinity of the general survey area. The trapping areas are located to the northwest and southeast of the proposed peaker and lay down sites, just outside of the general survey area, with the closest suitable area being approximately 800 ft west of the general peaker location.

The eastern portion of the site was sampled by three distinct trapping configurations comprised of two roughly parallel lines with 25 traps in each configuration. The southeastern and northwestern portions of the general survey area were sampled by two approximated parallel lines. All four configurations contained a total of 125 mesh live traps. Generally, traps were placed at 15 m intervals along each line with approximately 30 m between parallel lines. Traps were opened in late afternoon and baited with a mixture of wild birdseeds and peanut butter. Traps were checked at sunrise. All animals were identified to species and sex, assessed for relative age and reproductive activity, marked by clipping a patch of hair on the right flank, weighed and then released at their point of capture.

2.2.2 Delhi Sands Flower-loving Fly Surveys

The Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis)* is found only in areas where the Delhi Sands form in southwestern San Bernardino and northwestern Riverside Counties. This species requires fine, sandy soils, often with wholly or partly consolidated dunes, and sparse vegetation.

During much of the year when adults are not active and visible, field surveys focus on the presence/absence of specific host and nectar providing plants, in addition to the obligate Delhi

Sands formations. Where suitable habitat exists, field surveys are warranted. These require at least two survey visits every week between mid-July and the end of September.

No more than 50 acres of suitable habitat should be surveyed between the hours of 1000-1400 each day, with winds below five miles per hour. Surveys concentrate on the most favorable environments, but also include dirt roads, drainages, and some disturbed habitats with introduced plants found in sandy soils. Flies are searched for while resting on the ground, perching on low vegetation, and in flight. In open sandy areas near vegetation empty puparia are sometimes found partially exposed on the ground. Areas containing dense plant cover, such as introduced mustards, are eliminated because they are unsuitable as fly habitat.

Between 2003 and 2006, David Faulkner (USFWS Permit No. TE-838743-3) conducted standardized, USFWS protocol presence/absence surveys at the site (Appendix B).

3.0 RESULTS

3.1 Vegetation Communities and Sensitive Plants

The existing habitat conditions for the general survey area (Figure 1) can be divided into two general categories: 1) abandoned vineyard and 2) industrial gravel pad. Approximately 70% of the general survey area is composed of an abandoned vineyard, which is now a largely weedy, ruderal plant community dominated by *Brassica nigra* (Black Mustard). The remainder of the area is composed of a combination of industrial gravel pad with sparse vegetation, a small orchard, and a small substation with disturbed habitat. The remaining industrial gravel region is located within the center southern portion of the general survey area, with the small orchard east of that, and the small substation in the far southeast corner of the general survey area. Although Riversidian alluvial fan sage scrub was observed, it was found northwest of the general survey area and will not be impacted by the proposed Etiwanda peaker project.

The general peaker area is located within the north and southwestern portions of the general survey area, among the abandoned vineyard region. The proposed Etiwanda peaker location is dominated by Ruderal Grassland and Summer Mustard-Annual Bursage Ruderal Grassland Series' vegetation community (Sawyer and Keeler-Wolf 1995). The Ruderal Grassland Series is dominated by annual and perennial, nonnative, pioneering, herbaceous plants that readily colonize disturbed ground. It is a plant community that is typically found in early successional stages as a result of a severe disturbance by natural or human causes, or because the land is subject to recurrent disturbance (Zedler *et al*. 1997). The Ruderal Grassland Series found onsite is dominated by *Hirschfeldia incana* (Summer Mustard) and *Ambrosia acanthicarpa* (Annual Bursage) with scattered associate herbaceous species, and scattered patches of shrubs. Summer Mustard-Annual Bursage Ruderal Grassland Series, also consistent throughout most of the site, exemplifies some differences between the east and the west side of the peaker survey location during field surveys.

The east side of the general peaker location consists of sandy and rocky hard surfaced soils. *Centaurea melitensis* (Tocalote) and *Marrubium vulgare* (White Horehound) are important nonnative contributors to Summer Mustard-Annual Bursage Ruderal Grassland Series in this portion of the project site; however, several scattered native associate herbs were also observed.

These include: *Astragalus douglasii* var. *douglasii* (Douglas' Milkvetch), *Camissonia* sp. (primrose [dead]), *Croton californicus* var. *californicus* (California Croton), *Chamaesyce albomarginata* (Prostrate Spurge), *Eremocarpus setigerus* (Dove Weed), *Eriogonum elongatum* var. *elongatum* (Long-stemmed Buckwheat), *E. gracile* var. *gracile* (Slender Woolly Buckwheat), *Heterotheca grandiflora* (Telegraph Weed), *Lotus purshianus* var. *purshianus* (Spanish Clover), and *Lessingia lemmonii* var. *lemmonii* (Lemmon Lessingia). The scattered native shrubs observed on the eastern portion include: *Eriogonum fasciculatum* var. *foliolosum* (Leafy California Buckwheat), *E. fasciculatum* var. *polifolium* (Hoary California Buckwheat), *Lepidospartum squamatum* (Scalebroom), and *Senecio flaccidus* var. *douglasii* (Shrubby Butterweed). A dense patch of *Simmondsia chinensis* (Jojoba) exists in the extreme southeastern corner of the site, along with an adjacent small dense stand of the ornamental tree (*Prosopis* cf. *velutina* [Mesquite]).

The west side of the peaker location consists of deep fine-sandy soil. The vegetation on the west side consists almost entirely of Summer Mustard and Annual Bursage with only very scattered *Astragalus douglasii* var. *douglasii, Eriogonum fasciculatum* var. *foliolosum, Marrubium vulgare*, and *Solanum douglasii* (Douglas' nightshade). A small, inconspicuous, dry drainage was observed in the west portion of the general survey area, which was sparsely inhabited by the native wetland shrub *Salix exigua* (Narrow-leaved Willow) and the invasive tree-like shrub *Nicotiana glauca* (Tree Tobacco). The Wetland Indicator Status for Narrow-leaved Willow is OBL, or obligate wetland species, which occurs almost always in wetlands (Reed 1988). However, in order to be considered a jurisdictional wetland under Section 404 of the Clean Water Act (CWA), an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. Several parameters may be analyzed to determine whether the criteria are satisfied. The presence of a few scattered remnant wetland obligate species alone is insufficient to qualify this site as a wetland per current federal regulations. Hydric soils and wetland hydrology are absent from this site; therefore the site does not qualify as a wetlands. Additionally, the proposed Etiwanda peaker project will not impact this habitat.

The agricultural portion of the site is not suitable habitat for any rare, threatened or endangered plants. Table 1 lists the special-status plant species that may occur in the general survey area and that were the object of further assessment. A compiled list of the vascular plants observed at or near the proposed project site during the previous site visits can be found on Table 2.
Only one special-status plant species, *Navarretia prostrata* (Prostrate Navarretia), was found to have any potential of occurring within the general survey area based on the habitat availability, habitat distribution and search results of the CDFG's CNDDB RareFind2 for the Guasti 7.5 min. USGS quadrangle. This species is a Federal Species of Concern, with no special state status. Prostrate Navarretia is an annual herb found in the Polemoniaceae family that is included in the CNPS List 1B category (R-E-D Code 2-2-3) (Appendix A). It blooms April through July, occurring mainly in coastal scrub, valley and foothill grassland (alkaline), and vernal pool habitat types, at elevations between 15 - 700 meters. Most of the habitat conditions needed by this plant do not occur on the project site, including the elevation requirement which is ca. 600 meters at the project site. No endangered, threatened, rare or sensitive vascular plants, including Prostrate Navarretia, were observed on the site.

3.2 Wildlife Resources

Table 3 lists the special-status wildlife species that may occur in the general region and that were the object of further assessment. The bird species detected on the site are typical of common bird species known to occur in southern San Bernardino County. Bird species observed at the site include: the red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), rock dove (*Columba livia*), mourning dove, (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), northern rough-winged swallow (*Stelgidopteryx serripennis*), cliff swallow (*Petrochelidon pyrrhonota*), western scrub jay (*Aphelocoma coerulescens*), American crow (*Corvus brachyrhynchos*), common bushtit (*Psaltriparus* minimus), northern mockingbird (*Mimus polyglottus*), European starling (*Sturnus vulgaris*), California towhee (*Pipilo fuscus*), western meadowlark (*Sturnella neglecta*), brown-headed cowbird (*Molothrus ater*), lesser goldfinch (*Carduelis psaltria*), and house finch (*Carpodacus mexicanus*).

Roughly twenty-four special-status wildlife species have the potential to occur in the general region of the project site. Of these twenty-four, five wildlife species have a higher likelihood of occurring at the proposed peaker site during some portion of their life cycle based on habitat suitability and past occurrences. These species include the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), and burrowing owl (*Athene cunicularia hypugea*). Reconnaissance level surveys revealed the presence of one or more habitat requirements for each of these five species. Additional investigations were conducted to more thoroughly determine their presence/absence. The results of these investigations are discussed in more detail below.

3.2.1 Delhi Sands Flower-loving Fly –

The Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*: Family *Apioceridae* [*Mydidae?*]) was listed as Federally Endangered in 1993 (Federal Register 58: 49881). This fly subspecies is restricted to the remnant Colton dune soils system in San Bernardino and Riverside Counties of southern California. Only a small percentage of the original habitat is available to this insect, the remainder has been altered by urbanization, agriculture, or commercial development. Much of the once continuous habitat has now been fragmented, isolated by freeway construction and modifications to natural drainage systems, in addition to the changes mentioned above. A draft recovery plan for the subspecies was released by the USFWS (Mattoni 1996), for the reasons mentioned above.

Eggs are deposited in suitable soils during the adult flight period from about early-July through late-September. They hatch in 11 – 12 days depending on weather conditions. Larvae are believed to be predatory on soil invertebrates; however, no scientific research exists. They may develop for as long as two years before finally pupating and emerging as distinctive one-inch long orange-brown adults. Emergence takes place near the soil surface where abandoned puparia can sometimes also be found. Adult flies reach sexual maturity in a few days, mate, and eventually deposit eggs (Kingsley 1996).

Suitable habitats include open sandy areas with scattered vegetation including indicator species such as buckwheat (*Eriogonum spp.*) and telegraph weed (*Heterotheca grandiflora*), which may be used for perching sites by females. In 1999, the fly was seen within 1 mi of the site near the power lines south of Jurupa Street. There are other records within the Jurupa recovery area as designated by the USFWS. Following an initial site assessment on July 15 of 2003, suitable areas on the property were determined to possibly support colonies of the Delhi Sands Fly. Factors include sandy soils, adult nectar sources, and indicator species of plants such as buckwheat, telegraph weed, and croton. The area was also found to have colonies of the harvester ant (Genus *Pogonomyrmex*), which may be necessary for the Delhi Sands Fly's larval success. Four site visits were conducted for the proposed project site plus buffer area, during 2003 (Figure 1). Surveys to detect this species have been ongoing since 2003.

As of September 2006, there is no indication of the presence of the Delhi Sands flower-loving fly (DSF) at the proposed project site. While some promising habitat features are present at the site, after four seasons of detailed surveys this insect has yet to be encountered. It is doubtful that the property currently supports a population of the DSF (D. Faulkner, pers. communication, Appendix B).

3.2.2 San Diego Horned Lizard -

The San Diego horned lizard (*Phrynosoma coronatum blainvillei)* is a California Species of Special Concern. It ranges from Ventura County south into Baja California, Mexico (Jennings and Hayes 1994). Horned lizards occur in a variety of habitat types but are most commonly found in shrub-dominated habitats. Specific habitat features that often indicate their presence include loose, fine soils with a high sand content; the presence of native ants, a common food source; open areas in the vegetation that are used for basking; and areas of low, dense shrubs that provide refuge and cover from predators. Loss of habitat in lowlands due to development and urbanization is a main limiting factor for this species survival. The elimination of native ants by Argentine ants, and the recent arrival of red fire ants, may pose additional long term problems.

In the CDFG's CNDDB RareFind2 system there are three occurrence records for San Diego horned lizards on the Cucamonga Peak 7.5 minute USGS quad, and two occurrence records on the Guasti 7.5 minutes USGS quad, respectively. For Cucamonga Peak quad, the location of Occurrence No. 37 is unspecific other than the mention of East Etiwanda Canyon. Occurrence No. 377 cites the location (numerous individuals observed) as north of Highland Avenue along Day Creek northwest of Etiwanda (wash of Day and Deer Canyons). Occurrence No. 378 cites the location (numerous individuals observed) as north and south of Highland Avenue southeast of I-15 and east of Etiwanda, CA. For Guasti quad, Occurrence No. 38 is for Etiwanda from 2.0 – 3.5 mi north of the intersection of I-10 and I-15. Occurrence No. 437 is 0.5 mi north of Mission Boulevard and 1.5 mi west of I-15, west of Fontana, CA.

Although suitable habitat exists for this wide-ranging lizard species, no San Diego horned lizards were observed on the project site. No specific habitat features, especially the presence of suitable soil conditions were observed during visits to the project site. However, some harvester ants have been found at this site during site visits conducted by D. Faulkner.

3.2.3 Small-mammal Trapping Results -

California ground squirrel (*Spermophilus beecheyi*) burrows, as well as individuals, were visually abundant at the site during the small-mammal trappings (see 2.2.1 Small Mammal Trapping of this report for methods and conditions). Limited sign of Botta's pocket gopher (*Thomomys bottae*) was also found. Although some evidence of kangaroo rat sign was observed during the site visit, small-mammal trapping results verified the sign observed was due to juvenile and adult Dulzura kangaroo rats (*Dipodomys simulans*). No San Bernardino kangaroo rats were trapped; therefore, Dulzura kangaroo rats are believed to account for all of the observed kangaroo rat sign. Portions of the project area had been graded or recently disked, which contained little vegetation and no visible sign of small mammals during the small-mammal trappings. Species richness within these portions was low compared to that expected in alluvial fan sage scrub, located northwest outside of the general survey area.

3.2.4 San Bernardino Kangaroo Rat –

The San Bernardino kangaroo rat (*Dipodomys merriami parvus*), a federal endangered species, is found primarily in sandy loam substrates, characteristic of alluvial fans and flood plains, where able to dig simple, shallow burrows (McKernan 1997). The historical range of the San Bernardino kangaroo rat extends from the San Bernardino Valley in San Bernardino County to Menifee Valley in Riverside County (USFWS 1998). The current distribution is not entirely documented; however, a large population exists along the Santa Ana River upstream to Greenspot Road Bridge approximately 20 miles northeast of the proposed project site. They also occur along lower Lytle Creek and Cajon Wash. Vegetation in these areas is typically alluvial sage scrub or chaparral.

San Bernardino kangaroo rats were reported to occur within the southernmost portion of the Etiwanda Creek channel immediately north of I-10 approximately 1 mi south of the project site (USFWS, personal communication). The putative occurrence of San Bernardino kangaroo rats is supposedly from a capture in 1990 or 1991 (attributed to McKernon 1997); however, the nearest location is cited by McKernon (1997) as the SE ½ of Section 20 T1N [sic] R6W, which could include portions of Etiwanda Creek drainage either north or south of I-10. There is no reference as to which side of the freeway is correct, or when the supposed capture occurred. No information was presented as to whether other portions of Etiwanda Creek north of I-10 were sampled at the same time. No San Bernardino kangaroo rats were captured during an intensive trapping of the remaining natural channel of Etiwanda Creek immediately east of the present project area (O'Farrell 1999) or on the southeast portion of the Etiwanda Substation(O'Farrell, 2001). Therefore, the occurrence described above is based on hearsay with no qualification as to exactly when and where the alleged capture occurred and whether this was an isolated finding in a larger survey.

Based on the currently disturbed conditions of the habitat, surrounding development, and lack of San Bernardino kangaroo rats captured in the small-mammal trapping, there does not appear to be any future opportunity for natural re-occupation by the San Bernardino kangaroo rat in this area. Therefore, the project is not expected to impact any San Bernardino kangaroo rats.

3.2.5 Los Angeles Pocket Mouse -

The Los Angeles pocket mouse (*Perognathus longimembris brevinasus)* is a California Species of Special Concern. The known range of the species extends throughout the Los Angeles Basin from the San Fernando Valley on the west, to San Bernardino on the east, near Hemet (San Jacinto Valley) to the southeast (Stephenson and Calcarone 1999). This species typically occupies areas with fine, sandy soils, typically in arid grassland or coastal sage scrub habitats (Genoways and Brown 1993). Most recorded occurrences are below 2,200 ft elevation.

There is one occurrence record for this species (No. 33) on the Guasti 7.5 minutes quad in the CDFG's CNDDB RareFind2 system. This was in an area of relict Riversidian alluvial sage scrub with relatively flat terrain and riverwash soils. It was located on the east side of Etiwanda Avenue 0.5 mi north of San Bernardino Avenue in Fontana, CA. The majority of the general peaker location is degraded, with only small fragments of habitat potentially suitable for the Los Angeles pocket mouse. However, the Los Angeles pocket mouse was found in the northwest and southeast portions outside of the general survey area during the small mammal trappings (see Section 2.2.1 Small Mammal Trapping). So, although the general peaker location is degraded, small pockets of fragmented suitable habitat in the general area could potentially support this species.

3.2.6 Burrowing Owl –

Burrowing owls (*Athene cunicularia hypugea*) inhabit open habitat, including annual and perennial grasslands, deserts, arid scrublands, and agricultural fields. A key feature of suitable habitat requires that canopy cover and the height of the vegetation is low. Insects are the primary prey, but small mammals, reptiles, birds, and carrion are also consumed. Burrowing owls hunt from perches. They hover over prey, dive and cover the prey on the ground.

Burrowing owls nest in burrows typically dug by fossorial mammals, such as California ground squirrels. Old rodent burrows are important for roosting and nesting. Manmade structures, such as cement culverts and debris piles, may also be used. Burrowing owls exhibit high site fidelity, reusing the same burrows year after year. Most burrowing owls in California are resident although there may be some downslope migration in winter. Breeding occurs between March and August with most occurring in April and May. Habitat loss, through agricultural type conversions and development, ground squirrel poisoning, and car collisions are the main causes of population declines.

The western burrowing owl is a State Species of Special Concern that has been recorded in the general vicinity. Although burrowing owls have been known to occur in the vicinity of the project area, they are unlikely to nest onsite due to a lack of suitable habitat. The project site has been heavily disturbed by habitat alteration and recent activity and there was no evidence of suitable burrows for burrowing owls found during any of the site visits. There is however, suitable foraging habitat onsite, so there is potential for them to occur in the project area.

4.0 REGULATORY SETTING

4.1 Federal Regulations

4.1.1. Federal Regulation of Waters of the United States, Including Wetlands (Clean Water Act Sections 404 and 401)–

The U.S. Army Corps of Engineers (Corps or USACE) and the Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into "*waters of the United States*", including wetlands, under Section 404 of the Clean Water Act (CWA). The USACE has defined the term "wetlands" as follows:

> *"Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstance do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."*

Some classes of fill activities may be authorized under general permits if specific conditions are met. Projects that would result in the placement of dredged or fill material into waters of the U.S. require a Section 404 permit from the Corps. Utility line construction activities that result in the placement of fill into waters of the U.S. may be authorized under Section 404 Nationwide Permit 12 (at the discretion of the Corps). Nationwide Permit 12 also notes that overhead utility lines constructed over navigable waters of the United States require a Rivers and Harbors Act Section 10 permit. The general definition of navigable waters of the United States includes those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or are presently used or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce. Nationwide permits do not authorize activities that are likely to jeopardize the existence of a threatened or endangered species (listed or proposed for listing under the federal Endangered Species Act) or that may affect properties listed or eligible for listing in the National Register of Historic Places (56 FR 59134, November 22, 1991). In addition to conditions outlined under each nationwide permit, project-specific conditions may be required by the Corps as part of the Section 404 permitting process.

Section 401 of the CWA requires the issuance of a water quality certification or waiver thereof for all Section 404 nationwide or individual permits issued by the Corps. The EPA has deferred water quality certification authority to the Regional Water Quality Control Board (RWQCB). The federal government also supports a policy of minimizing "*the destruction, loss, or degradation of wetlands*." Executive Order 11990 (May 24, 1977) requires that each federal agency take action to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

4.1.2. Federal Policies on Riparian Communities in California–

Riparian communities have a variety of functions, including providing high-quality habitat for resident and migrant wildlife, streambank stabilization, and runoff water filtration. Throughout the United States, riparian habitats have declined substantially in extent and quality compared with their historical distribution and condition. These declines have increased concerns about dependent plant and wildlife species, which consequently, has lead federal agencies to adopt policies to arrest further loss. United States Fish and Wildlife Service (USFWS) mitigation policy identifies California's riparian habitats as belonging to resource Category 2, for which no net loss of existing habitat value is recommended (46 FR 7644, January 23, 1981).

4.1.3. Federal Endangered Species Act–

The USFWS and National Oceanic and Atmospheric Administration (NOAA) Fisheries oversee the federal Endangered Species Act (ESA). Sections 9 and 4(d) of the ESA prohibit the "*take*" of any fish or wildlife species listed as endangered or threatened, including the destruction of habitat that could hinder species recovery. The ESA defines take as, "*to harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect listed animal species, or attempt to engage in such conduct.*" The Section 9 take prohibition of the ESA applies only to wildlife and fish species. Section 9 also prohibits the removal, possession, damage, or destruction of any endangered plant from federal lands. Section 9 further prohibits acts to remove, cut, dig up, damage, or destroy an endangered plant species in non-federal areas in knowing violation of any state law or in the course of criminal trespass.

Candidate species and species that are proposed for listing receive no protection under the ESA. The USFWS has jurisdiction over plants, wildlife, and resident fish; NOAA Fisheries has jurisdiction over anadromous fish, marine fish, and marine mammals. Section 7 of the Act mandates that all federal agencies consult with the USFWS and/or NOAA Fisheries to ensure that federal agencies' actions do not jeopardize the continued existence of a listed species or adversely modify critical habitat for listed species.

Under Section 10(a)(1)(B) of the ESA, permits to authorize "*incidental take*" of listed species may be issued. "*Incidental take*" is defined by the ESA as take that is incidental to, and not for the purpose of, carrying out an otherwise lawful activity. To obtain a take permit, an applicant must submit a HCP outlining what will be done to minimize and mitigate the impact of the permitted take on the listed species. The underlying principle of Section 10 exemption from the ESA is that some individuals of a species or portions of their habitat may be expendable over the short term, as long as enough protection is provided to ensure the long-term recovery of the species.

4.1.4. Federal Migratory Bird Treaty Act–

The Migratory Bird Treaty Act (MBTA) states that without a permit issued by the U.S. Department of the Interior, it is unlawful to pursue, hunt, take, capture, transport, import, or kill any migratory bird. A list of migratory bird species protected by the MBTA appears in 50 CFR 10.13.

4.1.5. Bald and Golden Eagle Protection Act–

The Bald and Golden Eagle Protection Act (The Eagle Act) amended in 1962, was originally implemented for the protection of bald eagles (*Haliaeetus leucocephalus*). In 1962, Congress amended the Eagle Act to cover golden eagles (*Aquila chrysaetos*), a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. This act makes it illegal to import, export, take (which includes molest or disturb), sell, purchase, or barter any bald eagle or golden eagle or part thereof. The golden eagle, however, is accorded somewhat lighter protection under the Eagle Act than the bald eagle (USFWS 2006b).

4.2 State Regulations

4.2.1. State Regulation of Waters–

The CDFG regulates activities that would interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream. Section 1602 of the California Fish and Game Code (CFGC) requires notification of the CDFG for lake or stream alteration activities. If, after notification is complete, the CDFG determines that the activity may substantially adversely affect an existing fish and wildlife resource, the CDFG has authority to issue a streambed alteration agreement under Section 1603 of the CFGC. Requirements to protect the integrity of biological resources and water quality are often conditions of streambed alteration agreements. These may include avoidance or minimization of heavy equipment use within stream zones, limitations on work periods to avoid impacts to wildlife and fisheries resources, and measures to restore degraded sites or compensate for permanent habitat losses.

4.2.2. Storm Water Pollution Prevention Plan–

The RWQCB implements water quality regulations under the federal CWA and the State Porter-Cologne Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of storm water runoff associated with construction activity. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

4*.2.3. California Endangered Species Act–*

California implemented its own Endangered Species Act (CESA) in 1984. The state act prohibits the take of state-listed endangered and threatened species; however, habitat destruction is not included in the state's definition of take. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. The CDFG administers the act and authorizes take through Section 2081 agreements (except for designated "*fully protected species*"). Regarding listed rare and endangered plant species, CESA defers to the California Native Plant Protection Act (NPPA) of 1977, which prohibits importing of rare and endangered plants into California, and the taking and selling of rare and endangered plants. The CESA includes an additional listing category for threatened plants which are not regulated under the NPPA. In this case, plants listed as rare or endangered under the NPPA are not protected under CESA but can be protected under the California Environmental Quality Act (CEQA). In addition, plants that are not state-listed but meet the state standards for listing, are also protected under CEQA (Guidelines, Section 15380). In practice, this is generally interpreted to mean that all species on lists 1B and 2 of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plant*s (CNPS 2006) potentially qualify for protection under CEQA, and some species on lists 3 and 4 of the CNPS Inventory may qualify for protection under CEQA. List 3 includes plants for which more information is needed on taxonomy or distribution. Some of these are rare and endangered enough to qualify for protection under CEQA. List 4 includes plants of limited distribution that may qualify for protection if their abundance and distribution characteristics are found to meet the state standards for listing.

4.2.4. California Fish and Game Code Bird Protections–

Section 3503 of the CFGC prohibits destruction of the nests or eggs of most native resident and migratory bird species. Section 3503.5 of the CFGC specifically prohibits the taking of raptors or destruction of their nests or eggs.

5.0 RESULTS FOR REGULATORY SETTING

5.1 Regulatory Requirements

Regulatory permits will not be required for this project.

5.2 Wetlands and Other Waters Coordination Summary

Not required for this project

5.3 Federal Endangered Species Act Consultation Summary

Not required for this project.

5.4 California Endangered Species Act consultation Summary

Not required for this project.

6.0 POTENTIAL ENVIRONMENTAL IMPACT ANALYSIS

Under CEQA Significance Criteria a project would be considered to have a potentially significant biological impact if it would:

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

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

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

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

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

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

In general, the primary criteria for determining significance of an impact on biological resources are sensitivity ratings and regulatory protection assigned by federal and state resource agencies

(e.g., USFWS, CDFG). Any activity within the proposed project area that results in the "take" of a federally or state-listed threatened or endangered species would be considered significant. To "take" is defined in the Federal Endangered Species Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect an endangered or threatened species or to attempt to engage in any of these activities." Harm not only includes killing a species, but activities that modify or significantly degrade habitat that could result in death or injury to individual members of a species by significantly disrupting their essential behavioral patterns. The number of individuals impacted is not relevant to determining significance; if one individual is, or could be impacted, then the impact would be considered significant.

Impacts to biological resources resulting from the construction of the proposed project can be characterized as four types and are described below:

- Direct impacts occur when biological resources are altered, disturbed, destroyed, or removed during the course of project implementation. Examples of direct impacts are loss of habitat because of grading, filling or "take" of a sensitive species.

- Indirect impacts occur when project-related activities impact biological resources in a manner other than direct. Potential indirect impacts include increased noise levels and nonnative weed establishment.

- Permanent impacts result in the irreversible loss of biological resources. Examples include the removal of sensitive vegetation or vegetation that supports a sensitive species, or chronic disturbance of sensitive species during a critical period (e.g., breeding season).

- Temporary impacts are reversible with the implementation of mitigation measures. Examples include the revegetation of an area cleared during construction, or short-term noise events associated with operations.

Based on proposed project activities and site conditions, it is reasonable to conclude that no significant direct, indirect, permanent, or temporary impacts to any special-status species or habitats will occur as a result of the proposed Etiwanda Peaker project. The proposed measures below minimize impacts to sensitive species with potential to occur within the project area.

General SCE Proposed Measures

- *Minimization of Ground Disturbance.* Clearing of vegetation would be confined to the minimal area needed to conduct the construction activities.
- *Nesting Survey.* If work must be conducted during the nesting season (March – August), a preconstruction survey will be performed by a qualified biologist at least one week prior to construction to determine the presence/absence of nesting activity within the Project Site. Should a legally-protected nest be located, the nest area will be avoided with an appropriate buffer as determined by a qualified biologist. If avoidance is not feasible, the qualified biologist will consult with the proper agencies (USFWS and CDFG) on nest/chick relocation measures.
- *Burrowing Owl Survey.* A preconstruction survey will be conducted no more than 30 days prior to ground disturbing activities to determine if any burrows are actively being

used by burrowing owls. Should burrowing owls be found within the project vicinity, proper distances will be kept from all occupied burrows, such as 160 feet from non-breeding dens and 250 feet from breeding dens and a qualified biological monitor will be present. If burrowing owls cannot be avoided, consultation with California Department of Fish and Game and/or United States Fish and Wildlife Service would be conducted.

- *Los Angeles Pocket Mouse Avoidance.* All potential Los Angeles pocket mouse burrows found within the Etiwanda peaker project site will be flagged by a qualified biologist and avoided, to the greatest extent possible, by the crews during construction. Additionally, a biological monitor will be present during initial site preparation to relocate any individuals found during construction.

7.0 MITIGATION MEASURES

Because there is no significant impact to sensitive vegetation or wildlife, no mitigation is offered for biological resources.

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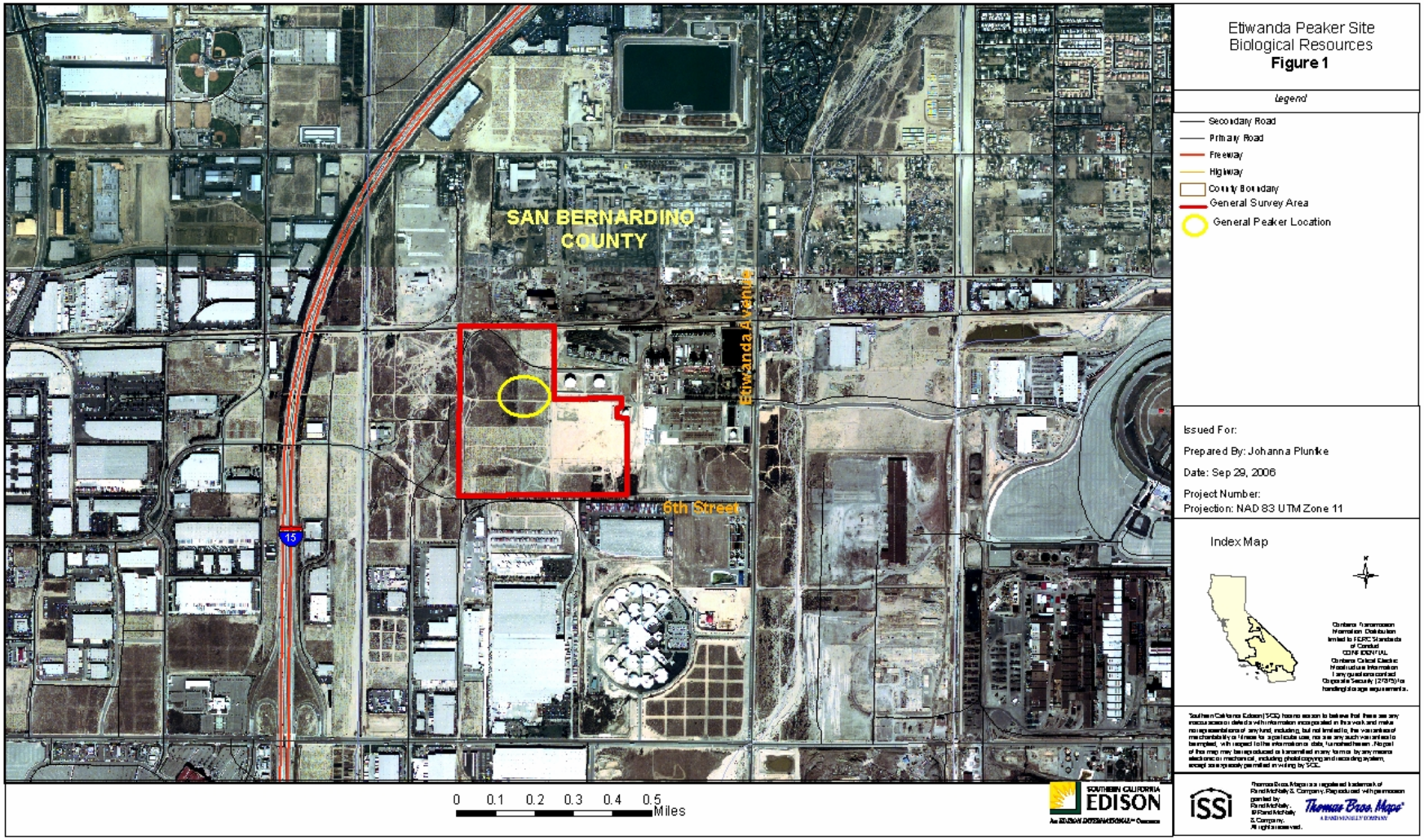

Figure 1. Arial map of the estimated 48 acre general survey area (outlined in red) and general peaker location (depicted in yellow). The general peaker location includes the proposed Etiwanda peaker site and the lay down area for materials.

Table 1. A target species list of rare plants with the potential to occur within the general survey area. Yellow denotes approximate flowering period. Green denotes vegetative period.

Scientific Name	Common Name	CA Status	Fed Status	CNPS List	CNPS R-E-D Code	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Abronia villosa var. *aurita*	Chaparral sand-verbena	None	None	1B	233								
Ambrosia pumila	San Diego bursage	None	None	1B	332								
Aster greatae	Greeata's aster	None	None	1B	213								
Atriplex coulteri	Coulter's saltbush	None	None	1B	222								
Berberis nevinii	Nevin's barberry	Endgrd	Endgrd	1B	333								
Calochortus plummerae	Plummer's mariposa	None	None	1B	223								
Centromadia pungens ssp. *laevis*	Smooth tarplant	None	None	1B	223								
Dodecahema leptoceras	Slender-horn spineflower	Endgrd	Endgrd	1B	333								
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	Endgrd	Endgrd	1B	333								
Horkelia cuneata ssp. *puberula*	Mesa horkelia	None	None	1B	233								
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None	None	1B	232								
Monardella pringlei	Pringle's coyote-mint	None	None	1A	extinct								
Navarretia prostrata	Prostrate navarretia	None	None	1B	233								
Sidalcea neomexicana	Salt spring checkerbloom	None	None	2	221								

Table 2. Vascular plants observed at or near the proposed project site during previous surveys described above.

Family	Scientific Name	Common Name	Life Form	Native Species?
Anacardiaceae	*Schinus molle*	Peruvian pepper tree	Tree	No
Asteraceae	*Ambrosia artemisiifolia*	annual ragweed	Annual herb	No
Asteraceae	*Centaurea melitensis*	tocalote	Annual herb	No
Asteraceae	*Lactuca serriola*	prickly lettuce	Annual herb	No
Asteraceae	*Artemisia californica*	California sagebrush	Shrub	Yes
Asteraceae	*Artemisia dracunculus*	tarragon	Perennial herb	Yes
Asteraceae	*Baccharis emoryi*	Emory's baccharis	Shrub	Yes
Asteraceae	*Chrysothamnus nauseosus ssp. mohavensis*	Mohave common rabbitbrush	Shrub	Yes
Asteraceae	*Conyza coulteri*	Coulter's horseweed	Annual herb	Yes
Asteraceae	*Encelia farinosa*	incienso	Shrub	Yes
Asteraceae	*Ericameria brachylepis*	boundary goldenbush	Shrub	Yes
Asteraceae	*Ericameria pinifolia*	pine-bush	Shrub	Yes
Asteraceae	*Helianthus annuus*	common sunflower	Annual herb	Yes
Asteraceae	*Heterotheca grandiflora*	telegraph weed	Perennial herb	Yes
Asteraceae	*Lepidospartum squamatum*	scale-broom	Shrub	Yes
Asteraceae	*Lessingia glandulifera var. glandulifera*	sticky lessingia	Annual herb	Yes
Asteraceae	*Senecio flaccidus var. douglasii*	Douglas' shrubby ragwort	Shrub	Yes
Boraginaceae	*Cryptantha muricata*	prickly cryptantha	Annual herb	Yes
Brassicaceae	*Brassica nigra*	black mustard	Annual herb	No
Cactaceae	*Opuntia littoralis*	coast prickly-pear	stem succulent	Yes

Family	Scientific Name	Common Name	Life Form	Native Species?
Euphorbiaceae	*Chamaesyce serpyllifolia ssp. serpyllifolia*	thyme-leafed spurge	Annual herb	Yes
Euphorbiaceae	*Croton californicus*	California croton	Perennial herb	Yes
Euphorbiaceae	*Eremocarpus setigerus*	turkey mullein	Annual herb	Yes
Fabaceae	*Prosopis velutina*	velvet mesquite	Tree, Shrub	No
Fabaceae	*Astragalus pomonensis*	Pomona milk-vetch	Perennial herb	Yes
Fabaceae	*Lotus purshianus var. purshianus*	Spanish clover	Annual herb	Yes
Lamiaceae	*Marrubium vulgare*	horehound	Perennial herb	No
Onagraceae	*Camissonia hirtella*	hairy sun-cups	Annual herb	Yes
Onagraceae	*Oenothera deltoides ssp. deltoides*	desert lantern	Annual herb	Yes
Poaceae	*Apera interrupta*	dense silky-bent	Annual herb	No
Poaceae	*Schismus arabicus*	Mediterranean grass	Annual herb	No
Poaceae	*Vulpia myuros var. myuros*	rattail fescue	Annual herb	No
Polygonaceae	*Eriogonum fasciculatum var. foliolosum*	California buckwheat	Shrub	Yes
Polygonaceae	*Eriogonum gracile var. gracile*	slender buckwheat	Annual herb	Yes
Salicaceae	*Salix exigua*	sandbar willow	Tree, Shrub	Yes
Simaroubaceae	*Ailanthus altissima*	tree-of-heaven	Tree	No
Simmondsiaceae	*Simmondsia chinensis*	jojoba	Shrub	Yes
Solanaceae	*Nicotiana glauca*	tree tobacco	Tree, Shrub	No
Solanaceae	*Solanum douglasii*	Douglas' nightshade	Shrub	Yes
Vitaceae	*Vitis vinifera*	wine grape	Vine	No

Table 3. Listed and sensitive wildlife species that may occur on-site or in the general project region because of proximity of the project site to potentially suitable habitat.

Scientific Name	Common Name	California Status	Federal Status	Likelihood of Occurence
Rhaphiomidas terminatus abdominalis	Delhi SandsfFlower-loving fly	None	Endangered	Habitat present; unlikely to occur
Phyrnosoma coronatum blainvillei	San Diego horned lizard	CSC	None	May occur
Crotalus ruber ruber	Northern red-diamond rattlesnake	CSC	None	Unlikely; poor habitat
Accipiter cooperi	Cooper's hawk	CSC	None	Not nesting; vagrant
Accipiter striatus	Sharp-shinned hawk	CSC	None	Not nesting; vagrant
Buteo regalis	Ferruginous hawk	CSC	Species of Concern	Winter vagrant
Circus cyaneus	Northern harrier	CSC	None	Unlikely to occur; poor habitat quality
Falco columbarius	Merlin	CSC	None	Rare winter vagrant
Falco mexicanus	Prairie falcon	CSC	None	Unlikely to occur; poor habitat quality
Falcon peregrinus	Peregrine falcon	Endangered	None	Unlikely to occur; poor habitat quality
Athene cunicularia hypugea	Burrowing owl	CSC	None	Unlikely to nest onsite; foraging habitat present
Polioptila californica	Coastal California gnatcatcher	CSC	Threatened	Not present
Lanius ludovicianus	Loggerhead shrike	CSC	None	May occur

Scientific Name	Common Name	California Status	Federal Status	Likelihood of Occurence
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	CSC	Species of Concern	Unlikely to occur
Amphispiza belli belli	Bell's sage sparrow	CSC	Species of Concern	Unlikely to occur
Macrotus californicus	California leaf-nosed bat	CSC	None	May occur
Lasiurus blossevillii	Western red bat	CSC	None	May occur
Euderma maculatum	Spotted bat	CSC	Species of Concern	May occur
Corynorhinus townsendii townsendii	Townsend's big-eared bat	CSC	None	May occur
Antrozous pallidus	Pallid bat	CSC	None	May occur
Eumops perotis californicus	Western mastiff bat	CSC	Species of Concern	May occur
Lepus californicus bennettii	San Diego black-tailed jackrabbitt	CSC	None	Unlikely to occur
Dipodomys merriami parvus	San Bernardino kangaroo rat	CSC	Endangered	Unlikely; poor habitat; trapping failed to detect occurrence.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	CSC	None	Verified present

Appendix 1. Definitions of California's special-status species.

Plants and wildlife protected under the California and Federal Endangered Species Acts or other regulations; or plants and wildlife considered rare by the scientific community to qualify for such listing; or plants and wildlife considered to be sensitive because they are unique, declining regionally/locally, or are at the extent of their natural range.

Special-Status Plants	Special-Status Wildlife
● Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in Federal Register for proposed species). ● Plants that are Species of Special Concern (SSC) (Category 1 or 2 candidates [C1, C2]) for possible future listing as threatened or endangered under the Federal Endangered Species Act (55 CFR 6184, February 21, 1990). ● Plants that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380). ● Plants considered by California Native Plant Society (CNPS) to be "rare, threatened, or endangered" in CA (Lists 1B and 2, Skinner and Pavlik [1994]). ● Plants listed by CNPS as plants needing more information and plants of limited distribution (Lists 3 and 4 in Skinner and Pavlik [1994]). ● Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5). ● Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.). ● Plants considered sensitive by other federal agencies (i.e., U.S. Forest Service, BLM) or state and local agencies or jurisdictions. ● Plants considered sensitive or unique by the scientific community; occurs at natural range limits (State CEQA Guidelines, Appendix G).	● Animals listed/proposed for listing as threatened/endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in Federal Register for proposed species). ● Animals that are Species of Special Concern (SSC) (Category 1 or 2 candidates [C1, C2]) for possible future listing as threatened or endangered under Federal Endangered Species Act (54 CFR 554). ● Animals that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380). ● Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5). ● Animal species of special concern to the CDFG (Remsen [1978] for birds; Williams [1986] for mammals) Jennings [1983). ● Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], 5050 [reptiles, amphibians]).

CNPS List	Definition
1A	Presumed Extinct in California
1B	Rare or Endangered in California and elsewhere
2	Rare and Endangered in California, more common elsewhere
3	Need more information
4	Plants of Limited Distribution

CNPS R-E-D Code		Definition
Rarity (R):	1	Rare, but found in sufficient numbers and distributed widely so that the potential for extinction is low.
	2	Distributed at limited number of sites, occasionally more if each occurrence is small
	3	Distributed in 1+ restricted occurrences, or present in such small numbers that it is seldom reported
Endangerment (E):	1	Not endangered
	2	Endangered in a portion of its range
	3	Endangered throughout its range
Distribution (D):	1	More or less widespread outside California
	2	Rare outside California
	3	Endemic to California

FORENSIC ENTOMOLOGY SERVICES

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RE: Etiwanda Peaker Site, Delhi Sands Flower-loving Fly Status, Protocol Surveys 2003-06 Flight Seasons USFWS Permit #TE-838743-3

Janet Baas:

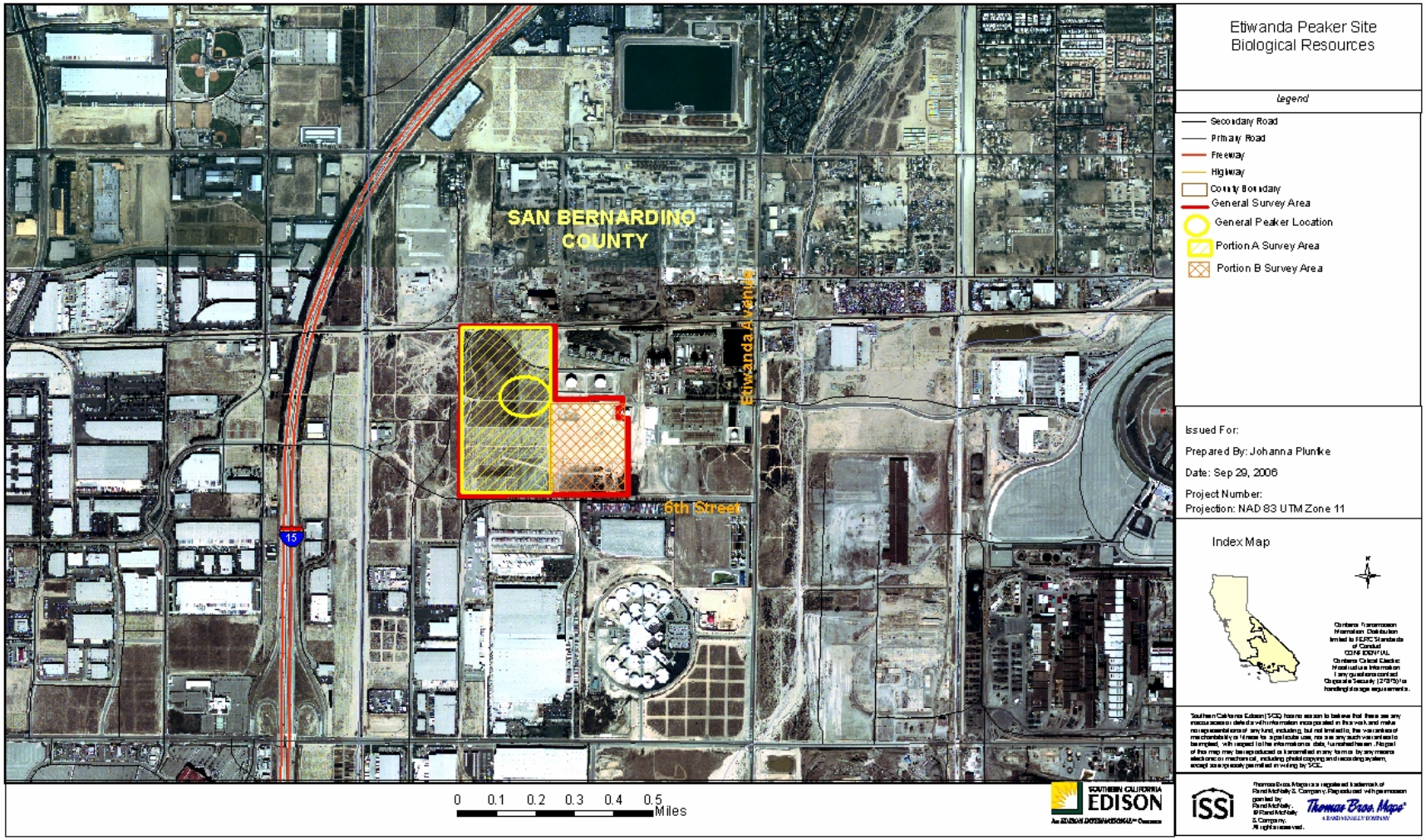
In response to your request for information relating to the current status of the Delhi Sands Flower-loving Fly (DSF), *Rhaphiomidas terminatus abdominalis*, on the Etiwanda Peaker Site, near the Etiwanda Substation Property, I have reviewed all of the surveys conducted from 2003 through the completion of the 2006 surveys. All results from these surveys were negative for the presence of adult DSF. Although certain survey seasons covered larger areas of the property, all surveys included what is currently called the Etiwanda Peaker Site. This site was originally surveyed for a different Southern California Edison (SCE) project and was known as the Stagecoach Site. Later, the name was changed to the Rancho Vista Site. It is still known by the name Rancho Vista, but also covers the same area as the Etiwanda Peaker Site. A short summary of those results follow.

1. 2003 Protocol Surveys. After completion of a site assessment, surveys were conducted from 20 July to 20 September in compliance with USFWS protocols on 60 acres of potential DSF habitat. The entire survey area was referred to as the SCE Stagecoach Property and a report was submitted to both the Service and to Bioresource Consultants. Results were negative.
2. 2004 Protocol Surveys. Surveys were initiated from 1 July through 20 September, as recommended by the Service, for the presence/absence of DSF adults. Results were negative for DSF adults. The Stagecoach Property was reduced to about 48 acres and included what is also referred to as the Peaker Site. Reports were again submitted to the Service and Bioresource Consultants.
3. 2005 Protocol Surveys. Again, surveys were conducted from 1 July through 20 September for DSF adults. Results were again negative for the presence of this insect and reports were submitted to the Service and directly to Southern California Edison. The 48 acre site was referred to as the Rancho Vista Property (Stagecoach/Etiwanda) which included the previously named Peaker site.

4. 2006 Protocol Surveys. The final report has yet to be submitted but the results were again negative for the presence of DSF adults. The site is still referred to as the Ranch Vista Property and includes all of the 48 acres surveyed in the previous three adult flight seasons.

The northern and western areas of the property (Portion A on the attached map) contains habitat that could support populations of DSF including suitable sandy soils, plants such as buckwheat, croton, and telegraph weed that are associated with existing DSF sites, along with many native insects that have been recorded in occupied DSF habitats. Sections of the property change from year to year as a result of rainfall, weedy introductions such as mustard that obscure exposed soils, and some human impacts that increase or reduce the suitability of the property for this insect. The southeast section of the property (Portion B on the attached map) contains a few suitable habitats, again with buckwheat, telegraph weed, croton, and exposed sandy soils along the dirt roads and limited natural drainages. However, most of this section has been disturbed leaving compacted soils, some with gravel, and closed-in areas of mustard, jojoba, tree tobacco, and mesquite. Surveys were adjusted to take advantage of the most favorable sites that would attract or support DSF adults. A map is attached to show the area surveyed. After four seasons of protocol surveys, this insect has yet to be encountered. It is doubtful that the property currently supports a population of the DSF.

David K. Faulkner
Entomologist



Arial map of the estimated 48 acre general survey area (outlined in red) surveyed by David Faulkner during the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis)* surveys conducted from July of 2003 through July of 2006. The general peaker location is depicted by a yellow oval and includes the proposed Etiwanda peaker site and the lay down area for materials. The portion A survey area (northwest and southwestern portion of the general area) was surveyed by D. Faulkner during the Delhi Sands flower-loving fly surveys is represented by diagonal yellow lines. The portion B survey area (southeastern corner of the general survey area) was surveyed by D. Faulkner during the Delhi Sands flower-loving fly surveys, is represented by brown diagonally checkered lines.