



Michael Brandman Associates

~~October 27, 2011~~ July 30, 2012

Ms. Kerry N. Willoughby, CEM, REA.
ACE Environmental, LLC
9976 Peak Lookout Street
Las Vegas, NV 89178

Subject: **Biological Resources Letter Report – 3rd Iteration**
Mobilite Cellular Facility Boulder Creek
Project Number MUP P11-006
Unincorporated Community of Descanso, San Diego County, California

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Dear Ms. Willoughby:

At the request of ACE Environmental, LLC and the County of San Diego (County), Michael Brandman Associates (MBA) has completed a Biological Resources Letter Report for Mobilite cellular facility Boulder Creek, herein referred to as project site or site, located in an unincorporated portion of San Diego County. This report is the 2nd 3rd iteration, and has been updated based on County comments received after the County's project review. Any incorporated changes have been underlined and any deletions are in strikethrough format. The County of San Diego is processing the proposed project as Case Number P11-006.

The subject letter report addresses the findings of a literature review and reconnaissance-level survey conducted as part of a biological resources impact analysis of the project site and surrounding area. The report also details the potential for sensitive biological resources to occur on the site, and analyzes the proposed project against relevant local, state, and/or federal policies as they pertain to biological resources. Recommended mitigation measures according to these policies are provided herein.

This report has been prepared by a San Diego County-approved consultant, in accordance with the County of San Diego requirements and guidelines for conducting a biological resources study.

If you have any questions or concerns regarding this report, please do not hesitate to contact me at 714.508.4100.

Sincerely,

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Michael Brandman Associates
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Irvine, CA 92602

SDC PDS RCVD 12-11-12

ENVIRONMENTAL SERVICES ■ PLANNING ■ NATURAL RESOURCES MANAGEMENT

P11-006

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Enclosures: Exhibit 1: Regional Location Map
Exhibit 2: Local Vicinity USGS Map
Exhibit 3: Local Vicinity Aerial Map
Exhibit 4: Soils Map
Exhibit 5: Biological Resources Map
Attachment A: Species Compendium
Attachment B-1: Sensitive Plant Species Table
Attachment B-2: Sensitive Wildlife Species Table
Attachment C: Site Photographs
Attachment D: CNDDDB Field Survey Form

TM/KLO

SECTION 1: SUMMARY

A biological resources impact analysis was conducted for the proposed Mobilltie cellular facility, Boulder Creek, as required by the County of San Diego Department of Planning and Land Use (County DPLU) in application for a Major Use Permit (MUP). The proposed project is a small, unmanned cellular facility located off Boulder Creek Road, west of the unincorporated community of Descanso, San Diego County, California. The project site occurs within the boundaries of the draft East County Subarea of the County of San Diego Multiple Species Conservation Program (MSCP). The East County Subarea Plan has not been approved as of this date, therefore, the project site will be evaluated according to the requirements adopted in the approved County of San Diego MSCP County of San Diego Guidelines for Determining Significance for Biological Resources.

The total acreage surveyed for the subject effort was 5.00 acres, which includes portions of the project site within Assessors Parcel Number (APN) 405-101-04. This is herein referred to as the survey area. As currently planned, the development footprint for the proposed project will result in 0.48 acre of impacts to granitic chamise chaparral, non-native grassland, and urban/developed areas. This 0.48-acre area is herein referred to as the project impact area. Approximately 0.34 acre of the project impact area will include permanent impacts to granitic chamise chaparral, 0.02 acre of permanent impacts to non-native grassland, and 0.12 acre of urban/developed land. The proposed project site will not impact any coast live oak trees located in the vicinity of the project site. Permanent impacts to granitic chamise chaparral and non-native grasslands shall be mitigated for at a 0.5:1 ratio at an offsite mitigation bank. Mitigation banking opportunities for granitic chamise chaparral are available and should be considered for the project at the Crestridge Phase Conservation Bank, which occurs within the central foothills ecoregion, or other approved mitigation banks in east San Diego County. Project-related impacts to urban/developed areas are not considered significant and do not require compensatory habitat-based mitigation.

A population of Cleveland monkey flower occurs within the survey area but outside of any project impact areas. ~~portion of the of project site that will be temporarily impacted by the proposed utility trenching.~~ This area should be completely avoided during trenching activities. Any potential project-related impacts to this population, although not likely, will be mitigated for through habitat based mitigation discussed above. ~~If these areas cannot be avoided during construction, the Cleveland monkey flower should be relocated to an area with similar and suitable habitat within the vicinity of the project site, but outside of any proposed impact areas.~~

The habitat assessment survey also included a focused habitat assessment for the Quino checkerspot butterfly (*Euphydryas editha quino*) in order to adequately address the potential for this species to occur on or in the immediate vicinity of the proposed impact area. This species is not likely to occur within the survey area due the absence of host plants for this species larval stage and a lack of abundant foraging resources.

Additionally, all brushing, clearing and/or grading within 500 feet of nesting raptor habitat and/or 300 feet of migratory bird nesting habitat shall be restricted to periods outside of the breeding season for raptors and migratory birds. Breeding season avoidance would reduce potential impacts to nesting birds and raptors protected under the MBTA and CFG Code to less than significant. Construction activity may be allowed within the designated buffer area at the discretion of a qualified biological monitor.

SECTION 2: INTRODUCTION

The proposed project is currently in application for a Major Use Permit pursuant to § 6980 et al. of the County of San Diego's Zoning Ordinance and thus is required to provide a thorough analysis of all potential on and offsite impacts through preparation of a California Environmental Quality Act (CEQA) level biological resources assessment. Per the request of the San Diego County Department of Planning and Land Use, a biological resources assessment was prepared to meet the survey requirements for 40 sensitive plant and wildlife species and address any potential project impacts to native vegetation or other sensitive natural resources.

2.1 - Project Site Location

The project site is generally located north of Interstate (I) 8 and east of I 15 (Exhibit 1). The site is depicted in Section 11 of Township 15 South, Range 3 West on the Tule Springs, California United States Geological Survey (USGS) 7.5-minute topographic map (Exhibit 2). The site is specifically located north of Boulder Creek Road, adjacent to an existing utility line transmission line (Exhibit 3).

2.2 - Project Description

Mobilite proposes to construct a small-unmanned cellular telecommunications facility that will provide extended service to the local area. The proposed project is in application with the County DPLU as MUP 11-006. The proposed project generally includes the development of an antenna structure, equipment, and utility line trenching within an undeveloped open space area.

The project consists of a faux water tank approximately 45' in height with antennas and associated equipment shelters. The water tank is being designed to accommodate up to two (2) carriers, with each provider having its own shelter. The proposed telecommunication facility would carry up to two (2) sets of twelve (12) panel-type antennas covering three (3) "sectors," with up to four (4) antennas per sector. Antennas would be integrated into the faux water tank. The facility is part of a broader network that consists of multiple facilities in the Julian area and general east San Diego County.

The project site is located at 10950 Boulder Creek Road in the Central Mountain Subregional Plan area, within unincorporated San Diego County. The site is subject to the General Plan Regional Category Rural Development Area (RDA), and Land Use Designation (23) National Forest/State Parks. Zoning for the site is 592 (General Rural). The project site is currently undeveloped; however, the current use of the parcel is for church retreat purposes. Access would be provided by a private driveway connecting to Boulder Creek Road.

Underground utility line trench routes for electrical and telco services have been designed to follow a new 12-foot wide non-exclusive access path. Trenching for electrical and telco utility lines will run for approximately 442 feet southeast, from the equipment shelter to an existing utility pole. Excavation requirements for the proposed underground utility line trenching will be limited to trenches with dimensions of approximately 2 feet 6 inches deep by 2 feet wide to accommodate joint and single conduits.

Main access to be utilized during the construction stage of the proposed project is provided via an existing dirt access road off Boulder Creek Road, just east of Goudie Truck Trail. Additional construction access and staging opportunities are provided via existing dirt access roads and disturbed areas associated with dirt access road associated with an existing utility transmission line. The proposed project is contained within an undeveloped open space area and will need the necessary fire clearing requirements.

SECTION 3: METHODOLOGY

Analysis of the biological resources associated with the project site began with a thorough review of relevant literature followed by a reconnaissance-level survey of the site and immediate vicinity.

3.1 - Literature Review

Prior to the habitat assessment survey, a literature review was conducted of the environmental setting of the project site and vicinity. The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the project site, as well as the surrounding area. For reference, the San Diego County Sensitive Plant and Wildlife Lists were reviewed for habitat assessment requirements as well as habitat suitability elements for 40 sensitive plant and wildlife species provided by the County of San Diego for review. The County of San Diego's Resource Protection Ordinance was reviewed for all applicable regulatory policy and potential mitigation requirements for the project.

The literature review also included aerial photographs of the project site and vicinity, as well as the topographic electronic and hard copies of the Tule Springs, California USGS 7.5-minute topographic quadrangle map.

In addition, a compilation of sensitive plant and wildlife species and their habitats that have been recorded in the vicinity of the project site was derived from the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDDB), a sensitive species and plant community account database. MBA conducted a query of the CNDDDB for the Tule Springs and Viejas Mountain, California USGS 7.5-minute topographic quadrangles.

The California Native Plant Society (CNPS) online inventory database was also queried for the project site and vicinity. The CNPS online inventory provided additional sensitive species information for many species that have not been reported to the CNDDDB database. Other references used for the subject analysis include "Rare Plants of San Diego County" by Craig Rieser, posted for the San Diego Chapter of the Sierra Club's website (<http://sandiego.sierraclub.org/rareplants/>), and "San Diego Native Plants" by James Lightner.

3.2 - Habitat Assessment Survey

MBA Biologist Scott Crawford conducted a reconnaissance-level survey of the project site on June 14, 2011. The survey area encompassed an approximately 5.0-acre area, which included the project footprint and an approximately 100-foot area surrounding the perimeter of the project footprint. The area was surveyed on foot in order to document existing conditions, identify suitable habitat for sensitive plant and wildlife species, and analyze potential direct and indirect impacts to sensitive biological resources based on current project plans. Special attention was directed to portions of the survey area that may provide suitable habitat for the 40 sensitive plant and wildlife species provided for analysis by the County.

The habitat assessment survey also included a focused habitat assessment for the Quino checkerspot butterfly, in order to address the potential for this species to occur on or in the immediate vicinity of the project site.

Parameters assessed regarding the habitat requirements for the 40 sensitive plant and wildlife species include the presence of suitable physical characteristics in topography, vegetation and plant community compositions, and soils. Additionally the presence of suitable nesting, roosting, foraging, including suitable prey base, or dispersing habitat was assessed. Any evidence of previous disturbance on the project site was carefully documented.

The locations of previously documented observations for the 40 sensitive plant and wildlife species were identified and plotted onto aerial and topographic maps to determine connectivity of suitable habitat and/or likely dispersing routes between the locations of observations and the project site. Habitat descriptions, plant communities, and a list of plant and wildlife species observed during the survey were recorded in a Floral and Fauna Compendium (Attachment A).

SECTION 4: HABITAT ASSESSMENT RESULTS

4.1 - Weather Conditions

The reconnaissance-level survey was conducted on June 14, 2011, between the hours of 0630 and 1230. Weather conditions during this survey included cloudy skies and a temperature of 68 degrees Fahrenheit, with winds ranging from approximately 0 to 2 miles per hour out of the west.

4.2 - Existing Conditions

Investigation of the survey area confirmed that the proposed facility would be constructed entirely within an undisturbed open space area. The survey area is primarily characterized by granitic chamise chaparral (California buckwheat/white sage association) with patches of California annual grasslands. There are also several scattered coast live oak trees; however, there is not a sufficient amount of oak trees to be considered a separate community. A highly disturbed dirt access road provides access to the existing utility transmission line. A secondary access road provides access to the project site, but has not been regularly maintained and is partially overgrown. General land use beyond the survey area consists of scattered rural residences to the east and relatively undisturbed open space areas to the north, south, and west.

4.2.1 - Topography and Soils

The survey area occurs within a gently sloping south-facing hillside at an elevation of approximately 3,400 feet above mean sea level northwest of the unincorporated community of Descanso. Higher elevations continue further to the east of the site toward Pine Ridge.

The survey area contains two soil map unit belonging to the Cieneba soil series. A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thickness, arrangement, and other important characteristics. The project site contains Cieneba very rocky coarse sandy loam, 30 to 75 percent slopes and Cieneba-Fallbrook rocky sandy loams, 9 to 30 percent slopes, eroded (Exhibit 4). No other mapped soil series are present onsite.

The observed surface soils throughout the majority of the survey area have been relatively unaltered. These soils contain evidence of previous clearing of vegetation, and subsequent scraping and compaction, most likely as a result of construction activities for the existing utility line transmission line.

4.2.2 - Disturbance

The proposed project is located in an undeveloped open space area and contains extensive evidence of disturbance associated with the 2007 wildfires. The project site has been subject to a number of disturbances including previous construction and maintenance activities associated with the existing utility transmission line. Additionally, the entire survey area and immediate vicinity contain extensive evidence of recent disturbance associated with the 2007 wildfires.

4.2.3 - Habitats/Vegetation Communities

Installation of the proposed facility will occur within portions of two natural plant communities: Granitic Chamise Chaparral and Non-native Grassland. The Biological Resources Map (Exhibit 5) provides detailed mapping of these communities within the survey area, which includes the proposed impact area and approximately 100 feet beyond the proposed impact area. A complete description of each community based on Holland and Oberbauer, and extent to which it occurs within the survey area is provided below. The respective Holland code for each community is provided in parenthesis below following each community section name. A complete list of plant species observed within the survey area during the habitat assessment survey is provided in Attachment A. Site photographs depicting the proposed project in relation to the existing conditions can be found in Attachment C.

Granitic Chamise Chaparral (37210)

Granitic chamise chaparral is typically a relatively dense, low-growing type of chaparral that grows on granitic surfaces and consists predominantly of chamise (*Adenostoma fasciculatum*), a drought-deciduous shrub that is particularly fire-prone. This non-sensitive habitat is very common in the foothills and valley slopes of the region, normally occurring in relatively dry, exposed areas. On site this community exhibits a mostly a homogeneous cover of chamise, but also intergrades with patches of California buckwheat (*Eriogonum fasciculatum*) and white sage (*Salvia apiana*). Other commonly plants include deer weed (*Lotus scoparia*), saw-tooth golden bush (*Hazardia squarrosa*), and short-podded mustard (*Hirschfeldia incana*). On the subject parcel, this vegetation covers approximately 3.5 acres.

Non-Native Grassland (42200)

Non-native grassland consists of non-native, annual grasses often associated with native annual forbs (Exhibit 5). These grasses begin to germinate with the fall rains, grow during the winter and spring, and wither in the early summer. This community is often found on clay soils (Holland 1986); it is incorporated into the California annual grassland series described by Sawyer and Keeler-Wolf (1995). Species observed in this plant community include red brome (*Bromus rubens*), ripgut grass (*Bromus diandrus*), and slender oats (*Avena barbata*).

Urban/Developed (12000)

Urban/developed habitat includes any form of human disturbance, especially in cases of permanent impacts to natural communities, and comprises approximately 0.6-acres of the survey area. By definition, disturbed areas include dirt roads, off-highway use, pavement, concrete, buildings and structures, bridges, agricultural activities, and permanent flood control measures.

4.2.4 - General Wildlife

The survey area and vicinity provide habitat for wildlife species that commonly occur in scrub habitats. Avian species observed or detected during the survey include wrentit (*Chamaea fasciata*), spotted towhee (*Pipilo maculatus*), and western kingbird (*Tyrannus verticalis*). Mammalian species observed or detected during the survey include desert cottontail (*Sylvilagus audubonii*). A pacific rattlesnake (*Crotalus viridis*) was detected within the survey area. A complete list of wildlife species observed on and in the immediate vicinity of the survey area is provided in Attachment A.

SECTION 5: SPECIAL STATUS SPECIES

5.1 - Special Status Plant and Wildlife Species

As provided by the County of San Diego records, a list of 40 special status plant and wildlife species was reviewed and analyzed. Two special status species tables have been prepared (Attachments B-1 and B-2) that detail the 40 special status plant and wildlife species, their legal status under endangered species acts, preferred habitat, detection results onsite, and potential for occurrence.

Special Status Plant Species

Special Status Plant Species are either listed by a resource agency, such as USFWS or CDFG, as a threatened or endangered species or is otherwise listed by the California Native Plant Society (CNPS). A CNPS listed species is assigned a status value by the CNPS based on rarity indices of List 1A, List 1B, List 2, List 3, or List 4, and a level of endangerment value for each rarity index of 0.1, 0.2, or 0.3. A CNPS List 4.3 species is defined by the CNPS as having a rarity index of List 4 (having limited distribution and is rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is currently low) and an endangerment value of 0.3 (not very endangered in California with less than 20 percent of occurrences threatened or no current threats known) (CNPS 2011). Cleveland monkeyflower was detected within the survey area (see Exhibit 5). None of the individual oak trees that were identified within the survey area occurs within the proposed impact area. No other special status plant species were determined to be present or have a high potential to occur within any portion of the survey area.

Special Status Wildlife Species

No special status wildlife species were determined to be present within the survey area. The project site has a low potential for nesting raptors, including Cooper's hawk (*Accipiter cooperi*), sharp-shinned hawk (*Accipiter striatus*), and red-shouldered hawk (*Buteo lineatus*). These three raptor species are not federally- or state-listed as threatened or endangered, or designated as a California state species of special concern; however, they are designated by the County of San Diego as Group 1 sensitive wildlife species. Suitable nesting opportunities within the local vicinity for these three raptor species is restricted to the oak woodland habitat located outside of the proposed impact area.

Eight additional special status wildlife species were determined to have a low potential to use portions of the survey area and/or proposed impact area for foraging, including Hermes copper (*Lycaena hermes*), San Diego ring-necked snake (*Diadophis punctatus similis*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), turkey vulture (*Cathartes aura*), western bluebird (*Sialia mexicana*), Dulzura California pocket mouse (*Chaetodipus californicus fermorails*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), and black-tailed jackrabbit (*Lepus californicus bennettii*). None of these eight species are federally- or state-listed as threatened or endangered; however, they are designated as California state species of special concern and/or County of San Diego Group 1 or 2 sensitive wildlife species. No other special status wildlife species were determined to be present or have a low, moderate, or high potential to occur within any portion of the survey area. The remaining 34 species will have no further discussion in this document.

5.2 - Quino Checkerspot Butterfly

Given the proposed project's location, it has been requested in the past by the County of San Diego that a habitat assessment be conducted in order to address the potential for the Quino checkerspot butterfly (QCB) to occur on or in the immediate vicinity of the project site. The analysis of potential project-related impacts to QCB was based on a thorough literature review of the species life history and population status in San Diego County, the results of the habitat assessment and reconnaissance survey of the site, professional expertise by permitted MBA biologists, and conversations with USFWS entomologists.

The project site is located within a larger region of southern California and San Diego County in which a number of populations of the QCB are known historically to exist each year (CNDDDB 2011). According to the USFWS, the project site exists within the Quino Survey Map, recommended survey area for QCB (Carlsbad Fish and Wildlife Office, USFWS Quino Checkerspot Butterfly Protocol and Monitoring Information page http://www.fws.gov/carlsbad/Quino_Monitor.htm, accessed June 12, 2011). According to data provided by the County DPLU GIS Application and records, the USFWS has recorded QCB observations within 10 miles west of the project site.

The following describes the status and habitat requirements of the QCB, and details this species potential for occurrence on the project site based on the existing conditions observed during the June 14, 2011 habitat assessment survey.

Target Species Conservation Status and Biology

The QCB is listed as a federally endangered and County Group 1 species whose populations are continually threatened to near extinction due to habitat loss, changes in climate, displacement of host plants and predation by exotic species. The QCB is a medium-sized butterfly in the Family Nymphalidae and is a subspecies to the *Euphydryas editha* species. QCB's range encompasses areas within the coastal plain and inland valleys of Los Angeles, Orange, Riverside, and San Diego Counties. QCB are best observed as adults when they are typically most active and flying from February through April. After mating, eggs are deposited by the female as clusters at the base of host plants. Larvae emerge from the eggs and exist in dormancy during a diapause period. Favorable conditions during the fall/winter stimulate the larvae to break diapause and emerge as a caterpillar, after which they experience a pupating stage before emerging again as breeding adult butterflies in spring. Male and virgin female adults can be observed "hill-topping" as a means of mate location and within open areas where host plants occur. This species has been documented within a number of plant community types, including clay soil meadows, native and non-native grasslands, coastal and semi-desert scrubs, and chaparrals with canopy openings supported by clay or cryptogamic crusts. As a vital habitat component, this species requires the presence of host plants in the families Plantaginaceae and Scrophulariaceae; most commonly dwarf plantain (*Plantago erecta*) and purple owl's-clover (*Castilleja exserta*).

Habitat Assessment Results

Currently, the project site and immediate vicinity do not contain the required habitat for QCB. In general, no host plant species for larvae QCB, including *Plantago erecta*, or any other potential host plants in the families Plantaginaceae and Scrophulariaceae were observed on or within an approximate 100-foot buffer surrounding the project site. One individual plant of owl's clover was observed adjacent to the project site, but was not within the project footprint. A single Lepidoptera species, cabbage white butterfly (*Pieris rapae*), was observed during the habitat assessment survey.

The dense granitic chamise chaparral habitat within the survey area does not provide suitable conditions for this species or its host plants. The substrates that characterize these areas have been disturbed by recent fire. As a result, the entire understory of the survey area has been established by disturbance-tolerant annual herbaceous species, and primarily shortpod mustard, filaree, deerweed, and non-native grasses. The survey area does not contain soil substrates or rocky outcrops characterized by cryptogamic crusts or other substrates that would promote the establishment of this species host plants. Marginal nectar and foraging opportunities for adult QCB occur within the survey area. The only flowering annuals and optional nectar sources observed within the proposed impact area include shortpod mustard, common phacelia, and deerweed. These and other foraging resources are more abundant within offsite areas that are characterized by habitat that is less disturbed. No portions of the survey area are highly suitable for basking or "hill-topping" adult species

Determination

The survey area does not contain the required habitat for larvae of QCB, and does not support an abundance of desirable foraging resources, or suitable basking or "hill-topping" habitat for adult species during the flight season. This species is not likely to occur within the survey area or the proposed impact area; therefore, the proposed project is not likely to result in any significant impacts to this species or its habitat.

5.3 - Raptor Foraging

The loss of foraging habitat for raptor species could be considered a significant impact depending on the overall size and nature of the impact, and the functions and values of the affected area relative to other areas in the local and regional vicinity in facilitating raptor use. In general, important raptor foraging areas are characterized by habitat types that are both compatible with foraging behavior (promote appropriate lines of sight, provide unobstructed access to prey, contain adequate perches, etc.) and support an adequate prey base for target raptors with the potential to range through the area. Typically, raptor foraging areas of local and regional importance are not fragmented or constrained by development or other incompatible land uses, and are relatively large in total area. Examples of raptor foraging areas of local and regional importance include the large contiguous stand of grasslands within the "Ramona grasslands" and the undeveloped desert scrub habitats in the Borrego Springs area. For year-round resident raptors, important foraging areas may be used frequently and repeatedly, and usually occur in close proximity to nest locations and territories. Wintering raptors with the potential to occasionally range through an area may use multiple foraging sites less frequently along a migratory route and within a wintering location.

In general, the survey area itself does not support the resources that would qualify it as an important area for foraging raptors, especially considering the availability of open habitat that surrounds the survey area in the local vicinity. For nearly all common and sensitive raptors with the potential to occur in the area, the survey area provides relatively poor foraging habitat due to its small size, lack of evident foraging resources, and susceptibility to ongoing disturbances associated with the existing dirt access road. The small size of the survey area and confined physical character provide limited space for most raptors to carry out their foraging behaviors and hunting techniques. Larger, wide-ranging raptors that are known to reside or winter in open habitats in the region include species such as northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), ferruginous hawk (*Buteo regalis*), prairie falcon (*Falco mexicanus*), peregrine falcon (*Falco peregrinus*), and golden eagle (*Aquila chrysaetos*). These species require less-confined, larger open spaces for foraging than that which characterizes the survey area for behaviors such as

soaring, scanning, hovering, kiting, coursing, stooping, and hunting from a perch. These raptor species are not likely to use the survey area for foraging. Smaller raptors that are known to reside or winter within less-open habitats in the region, including species such as the Cooper's hawk (*Accipiter cooperii*) and American kestrel (*Falco sparverius*), are known to forage in mid-air and among woodlands such as the oak woodland habitat that characterizes portions of the survey area and surrounding vicinity. These species forage primarily on the wing by pursuing other bird species in flight and/or fly catching from a perch. Based on the relatively poor habitat quality of the stand of oak woodland that characterizes the survey area, these raptor species have a low potential to use the survey area for foraging.

Due to the fact no raptor species were determined to have a moderate or high potential to forage within the survey area and that project impacts will be limited in size and primarily temporary in nature, impacts to raptor foraging are expected to be less than significant and no mitigation measures are recommended.

5.4 - Nesting Birds

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

Section 3503 of the California Fish and Game (CFG) Code makes it illegal to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Section 3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey, such as hawks and owls, and their eggs and nests from any form of take.

Construction of the proposed project will occur in the immediate vicinity of several coast live oak trees, in addition to low quality granitic chamise chaparral that provides marginal nesting habitat for common shrub-nesting birds. Therefore, the proposed project may result in potential significant indirect impacts to nesting birds protected under the MBTA and CFG Code.

5.5 - Large Mammal Use

The loss of habitat that is important in facilitating large mammal use could be considered a significant impact depending on the overall size and nature of the impact, project design considerations, and the functions and values of the affected area relative to other areas in the local and regional vicinity in promoting large mammal use. Large- and medium-sized mammals that are known to the region include species such as mountain lion (*Felis concolor*), southern mule deer (*Odocoileus hemionus*), American badger (*Taxidea taxus*), ringtail (*Bassariscus astutus*), bobcat (*Lynx rufus*), striped skunk (*Mephitis mephitis*), and coyote (*Canis latrans*), among others. These species are highly mobile within their home ranges, which can be many square miles in size and encompass a variety of habitat types depending on the species and the availability of resources at any given time throughout the year. For an area to be important in facilitating large mammal use, it should contain the resources necessary to carry out the life history requirements of target large mammal species, including those necessary for breeding, denning, nesting, rearing, pupping, foraging, staging, wintering, concentrating, migrating, and dispersing within or outside of home ranges.

There are a number of anthropogenic factors associated with the survey area and vicinity that would likely deter large mammals from using the area, most notably the presence of man-made barriers (e.g. Boulder Creek Road). No large mammals were observed and no sign was detected during the survey. When coupled with other contributing factors such as spatial limitations, lack of good quality live-in habitat, lack of foraging resources, lack of accessible water resources, and lack of landscape features (i.e. drainage features, floodplains, valleys, canyons, steep gullied lands, ridge tops, long linear stands of vegetation, riparian corridors, etc.), the survey area and vicinity do not function as having significant importance for large mammal use.

On a local and regional scale, the survey area does not function to support large mammal use. The proposed project is limited in size, and the extent of overall impacts are minimal (less than 0.10 acre). The operational requirements of the proposed project are minimal as well. Due to limiting factors and the fact that project impacts will be limited in size, potential impacts to large mammal use are expected to be less than significant and no mitigation measures are recommended.

SECTION 6: JURISDICTIONAL WETLANDS AND WATERWAYS

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria. USACE regulatory jurisdiction pursuant to Section 404 of the federal Clean Water Act (CWA) is founded on a connection or nexus between the water body in question and interstate commerce. This connection may be direct; through a tributary system, linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the USACE regulations.

6.1 - Waters of the U.S.

USACE jurisdiction over non-tidal waters of the United States extends laterally to the ordinary high water mark (OHWM) or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4). The OHWM is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area" (33 CFR 329.11(a) (1)). Jurisdiction typically extends upstream to the point where the OHWM is no longer perceptible. Recently, the federal courts have restricted USACE jurisdiction over waters that are not directly connected to traditional navigable waters (isolated waters), thereby increasing the focus on clearly establishing the physical connection between the subject water body(ies) as a tributary to traditional navigable waters or otherwise by directly establishing the nexus with interstate commerce.

During the biological assessment survey, the project site was evaluated according to the guidelines provided in the USACE *Jurisdictional Determination Form Instructional Guidebook* (2007) and the *Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest* (2001). Waters of the U.S. are absent from the survey area; no water bodies having a perceptible OHWM were identified within the survey area or immediate vicinity.

No impacts to any waters of the U.S. are expected to occur as a result of the proposed project; therefore, no mitigation is required.

6.2 - USACE Wetlands

The USACE and the Environmental Protection Act (EPA) define "wetlands" as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions." In order to be considered a jurisdictional wetland under Section 404 of the 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. During the field survey, the site was evaluated in accordance with the USACE *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (2006) and the *Wetlands Delineation Manual* (i.e. Environmental Laboratory, 1987).

The survey area occurs within a relatively flat upland area generally characterized by disturbed land and oak woodlands. No natural drainage courses, waterways, and/or wetlands containing hydrophytic plant species were observed on or in the immediate vicinity of the survey area; therefore, it was not necessary to examine the other two wetland criteria, hydrology and soils, since all three criteria must be met where wetlands are present.

No impacts to any USACE-defined wetlands are expected to occur as a result of the proposed project; therefore, no mitigation is required.

6.3 - County of San Diego Wetlands

The County of San Diego in their County Resource Protection Ordinance define "wetlands" as "All lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or where the land is covered by water. All lands having one or more of the following attributes are wetlands: a) At least periodically, the land supports predominately hydrophytes (plants whose habitat is water or very wet places); b) The substratum is predominately undrained hydric soil; or c) an ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system." In this definition, a "non-soil" substrate includes, but is not limited to, rock outcroppings, deepwater habitats, generally greater than 6.6 feet in depth, cobble rock, bedrock, or scoured channels.

The survey area occurs within a relatively flat upland area generally characterized by disturbed land and oak woodlands. No drainage features or depression areas subject to ponding exist on or in the immediate vicinity of the survey area. No hydrophytes were observed during the survey. The underlying substratum of the area is non-hydric, and is mapped as Cieneba rocky coarse sandy loam.

No impacts to any County-defined wetlands are expected to occur as a result of the proposed project; therefore, no mitigation is required.

SECTION 7: OTHER UNIQUE FEATURES/RESOURCES

7.1 - Wildlife Corridors and Linkages

The County of San Diego Guidelines for Determining Significance defines a corridor as “A specific route that is used for movement and migrations of species. A corridor may be different from a Linkage because it represents a smaller or more narrow avenue for movement.”, and defines a linkage as “An area of land which supports or contributes to the long-term movement of wildlife and genetic exchange by providing live-in habitat that connects to other habitat areas.”. The County of San Diego in their Subarea Plan of the Multiple Species Conservation Program (MSCP) define regional linkages/corridors as “Land which contains topography which serves to allow for the movement of all sizes of wildlife and is used by wildlife, including large animals on a regional scale; and contains adequate vegetation cover providing visual continuity so as to encourage the use of the corridor by wildlife; or It has been identified as the primary linkage/corridor between the northern and southern regional populations of the California gnatcatcher in the population viability analysis for the California gnatcatcher”.

The survey area occurs within a gently sloping upland area that is generally characterized by granitic chamise chaparral with an existing dirt access road, small patches of grassland areas, and is surrounded by constrained open space and scattered rural residences. An existing barbed-wire fence defines the project site southern boundary and serves to inhibit access to and from all portions of the property. The local area is void of any major topographic features or resources, such as canyon and drainage features, or significant stands of habitat (i.e. riparian corridors, habitat linkages, habitat blocks, etc.) that would promote the movement of wildlife, including large mammals, or migratory or resident birds or raptors.

On a local and regional scale, the survey area does not function as a wildlife corridor or linkage, and the proposed project would not interfere substantially with the movement of native resident or migratory fish or wildlife species, or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites. The proposed project is limited in size, and the extent of overall impacts are minimal (less than 0.50 acre). The operational requirements of the proposed project are minimal as well. Due to the fact that project impacts will be limited in size, impacts to wildlife movement and nursery sites, including corridors and linkages, are expected to be less than significant and no mitigation measures are recommended.

7.2 - Urban/Wildlands Interface and Adjacency Management Issues

An urban/wildlands interface is generally defined as land that presently contains, or will contain as a result of a proposed action, both elements of an urban setting and raw undeveloped land or protected land. This land is situated as such to present a sharply defined physical contrast between the two, potentially creating an adverse edge effect resulting from direct and/or indirect impacts derived from the urban elements. An urban/wildlands interface may be most recognizable in larger multi-use developments that occur within or immediately adjacent to completely undeveloped and undisturbed land that provides habitat for plant and wildlife species in the area.

The survey area is located within an undisturbed area surrounded by constrained open space and scattered rural residences. The majority of the land that occurs in the immediate vicinity of the proposed impact area and survey area contains existing developments and/or disturbances that reduce the overall function and value of the habitat that it provides. No design elements are proposed that would result in any significant indirect impacts to any adjacent undeveloped land or protected land, or any wildlife potentially using the project vicinity. The project will incorporate lighting features that will minimize all lighting to the maximum extent feasible away from the adjacent undeveloped land. External light sources will be designed with internal baffles to direct the lighting towards the ground and have a zero side angle cut off to the horizon.

Due to the limited size and operational requirements of the proposed project, impacts to an urban/wildlands interface are expected to be less than significant and no mitigation measures are recommended.

7.2.1 - Noise-Related Impacts

The proposed project includes specific design features to minimize and reduce any potential noise impacts to biological resources, which may result from the project operation. Noise generating equipment for the proposed project will be contained within an enclosed shelter that has been designed to reduce external noise levels. These design features will ensure that operation of the proposed project will achieve compliance with the required noise standards as required by the County. Furthermore, given the proximity to the existing private residence, the proposed project is not expected to result in additional adverse noise levels beyond that which is generated by the existing residential utilities and vehicles.

SECTION 8: SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

8.1 - Impact Analysis

This section of the report provides a discussion of potential project-related impacts. Mitigation to reduce these impacts to less than significant is provided in Section 8.2 below.

The 5.0-acre survey area contains a total of 0.90 acre of non-native grassland (California annual grassland), 3.50 acre of granitic chamise chaparral, and 0.6 acre of Urban/developed. Within the survey area, the proposed project will result in permanent impacts to granitic chamise chaparral and temporary impacts to granitic chamise chaparral, non-native grasslands, and Urban/Developed areas. No oak trees will be removed during the installation of the 100' X 100' (10,000 square feet or 0.23 acre) equipment area and utility line trenching (0.25 acre). The proposed project has been designed to avoid the 50 feet buffer of oak woodland canopy is not considered a significant impact any oak trees or oak woodland habitat in the vicinity of the project site.

The proposed project has been designed to restrict all construction related access, staging, and storage to urban/developed portions of the property that have been previously cleared and/or excavated, graded, and compacted. Development of the proposed project would include minor clearing, excavation, hand trenching, and backfilling activities that would result in permanent impacts to areas proposed for the equipment enclosure and water tank structure. Installation of the power and telco utility line trenching will result in temporary impacts to granitic chamise chaparral and non-native grassland areas

Opportunities for project access, haul routes, staging areas, and storage areas occur within existing bare earth access roads and disturbed land contained within the project site. No significant offsite impacts associated with access, haul routes, staging areas, and storage areas are anticipated to occur due to existing opportunities within disturbed and/or developed areas. Construction methods are anticipated to be largely contained within the existing disturbed areas and project development footprint. These activities will be low-impact, non-intrusive, and will either be conducted by hand-trench or low-impact drilling equipment where feasible. Impacts shall be executed in a method to avoid oak trees and associated root systems, and any native shrubs to the greatest extent feasible to further reduce the extent of permanent impacts.

8.1.1 - Habitats/Vegetation Communities

The total existing acres within the survey area and total impact acres resulting from the proposed project to each habitat type are outlined in Table 1.

Table 1: Habitat Type/Vegetation Communities and Impacts

Habitat / Vegetation Community	Existing (acres)	Impacts (acres)	Mitigation Ratio	Mitigation Required (acres)	Offsite Mitigation (acres)
Non-Native Grassland	0.90	0.02	0.5:1	0.01	0.01
Granitic Chamise Chaparral	3.50	0.34	0.5:1	0.17	0.17
Urban/ Developed	0.60	0.12	-	-	-
TOTAL	5.00	0.48	-	0.18	0.18

As currently designed, the proposed project will result in ground disturbing impacts to approximately 0.02 acres of non-native grassland, 0.34 acre of granitic chamise chaparral, and 0.12 acres of urban/developed areas. Project impacts to urban/developed areas are not considered significant and do not require mitigation. Impacts to 0.02 acre of non-native grassland and 0.34 acre of granitic chamise chaparral will result from construction of the permanent equipment area, that includes the water tank structure and other facility equipment, and from installation of the project's utility trench route (Exhibit 5). Under the County of San Diego Guidelines for Determining Significance of Biological Resources, impacts to vegetation communities that provide suitable habitat for sensitive plant species MSCP impacts to Tier III plant communities require habitat-based compensatory mitigation. Mitigation Measure MM-1 will reduce the any potential impact to a less than significant level.

8.1.2 - Special Status Species

Special Status Plant Species

At least fifteen individual Cleveland monkey flower occurs within the survey area and more specifically within the vicinity of the trench-line route. Temporary impacts from trenching may be considered significant if the trench route removes a significant size population of the sensitive plant. This plant is designated as a County List D species and CNPS 4.2 plant and is not listed as a threatened or endangered plant. As currently designed, the proposed project will not directly impact any individual Cleveland monkey flowers. Additionally, impacts related to suitable habitat for Cleveland monkey flower will be reduced to less than significant with incorporation of Mitigation Measure MM-1. As such, impacts related to Cleveland monkey flower will be reduced to less than significant through measure provided in Mitigation Measure MM 2, and no additional mitigation is required.

Special Status Wildlife Species

Eight special status wildlife species were determined to have a low potential to use portions of the survey area and/or proposed impact area for foraging or basking, including Hermes copper,

San Diego ring-necked snake, San Diego horned lizard, turkey vulture, western bluebird, Dulzura California pocket mouse, northwestern San Diego pocket mouse, and black-tailed jackrabbit. . All of these eight species are California state species of special concern and/or County of San Diego Group 1 or 2 sensitive wildlife species. The loss of foraging habitat and temporary displacement of individuals during construction activities could be considered significant; Potential impacts would be reduced to less than significant with the proposed habitat-based mitigation for the loss of granitic chamise chaparral habitat and breeding season avoidance mitigation for nesting birds.

Three special status raptor species were also determined to have a low potential to use portions of the survey area for foraging including Cooper's hawk, sharp-shinned hawk, and red-shouldered hawk. These raptor species are designated by the County of San Diego as Group 1 sensitive wildlife species. There is no suitable nesting opportunities within the survey area for these three raptor species. No direct impacts to any nesting habitat are anticipated to occur as a result of the proposed project, and potential indirect impacts to these species during nesting would be reduced to less than significant levels with the proposed breeding season avoidance mitigation for nesting birds within 500 linear feet of the project site. Potential impacts to special status wildlife species would be considered less than significant with the incorporation of Mitigation Measure MM-1 and ~~MM-2~~ provided below.

8.1.3 - Nesting Birds

The proposed impact area will occur on and in the immediate vicinity of habitat that supports marginal nesting habitat for common and sensitive bird species protected under the MBTA and CFG code. Therefore, construction activities that will result in the removal of any vegetation or occur in the immediate vicinity suitable nesting habitat may result in potential significant direct and indirect impacts to nesting birds protected under the MBTA and CFG Code.

Mitigation Measure MM-3 provided below will reduce potential project impacts to nesting bird species protected under the MBTA and CFG Code to less than significant.

8.2 - Proposed Mitigation

The following is a list of recommended mitigation measures that will reduce potential project-related impacts to biological resources to less than significant.

8.2.1 - Granitic Chamise Chaparral and Non-Native Grassland Impacts

As currently designed, the project impact area occurs within 0.36 acre of granitic chamise chaparral and non-native grassland habitat. Construction of the proposed project will result in permanent impacts to these two habitat types, resulting from the installation of the equipment area and utility trench line. Granitic chamise chaparral and non-native grasslands are considered sensitive habitat communities under the San Diego County Guidelines ~~Tier III habitats under the MSCP~~, and therefore, permanent project-related impacts will require compensatory mitigation. The following will reduce impacts to granitic chamise chaparral and non-native grassland to less than significant:

- MM-1 Habitat-based compensatory mitigation for impacts to 0.36 acre of granitic chamise chaparral and non-native grassland shall be mitigated for at a ratio of 0.5:1 (0.18 acre total) at an offsite location that will be determined through agreements with the County of San Diego, thereby reducing any potentially significant project impacts to these two habitats to less than significant. Mitigation banking opportunities for granitic chamise chaparral are available and should be considered for the project at the Crestridge Phase

Conservation Bank, which occurs within the central foothills ecoregion, or other approved mitigation banks in east San Diego County.

8.2.2 - Cleveland Monkey Flower Impacts

~~As currently designed, the proposed 0.25-acre of trenching trench route occurs within an area that contains a population of Cleveland monkey flower. The following will reduce impacts to Cleveland Monkey Flower to less than significant:~~

~~MM-2 Prior to trench construction, a biological monitor should flag all areas containing Cleveland monkey flower. These areas should be completely avoided. On site restoration of the temporary disturbance associated with the trench route is covered under MM-1. If these areas cannot be avoided, and installation of the trench route will result in the removal of any number of Cleveland monkey flower, the potentially impacted specimens should be relocated to suitable habitat within the immediate vicinity of the project site, but outside of any disturbance areas.~~

8.2.3 - Nesting Birds

To avoid any direct or indirect impacts to nesting birds pursuant to the MBTA and CFG Code, the Major Use Permit shall include the following condition:

MM-3 The project shall restrict all brushing, clearing and/or grading such that none will be allowed within 500 feet of nesting raptor habitat and/or 300 feet of migratory bird nesting habitat during the breeding season of raptors and migratory birds. This is defined as occurring between February 1 and August 31. The Director of Planning and Land Use may waive this condition, through written concurrence from the US Fish and Wildlife Service and the California Department of Fish and Game, that no nesting migratory birds or raptors are present in the vicinity of the brushing, clearing or grading. This mitigation measure will require a pre-construction nesting bird survey to determine if any nest or nesting activities occur within the project site and a 500-foot buffer around the site.

SECTION 9: CUMULATIVE IMPACTS

A project list for the biological resources cumulative impact analysis has been compiled in accordance with the County of San Diego Guidelines for Determining Significance for Biological Resources. The list has been developed in consultation with County DPLU staff for projects in the region, and through research of relevant past, present, and future projects captured within a two-mile radius of the proposed project, as established by the County DPLU. In addition to project location, the cumulative project list was selected based on comparability and relevancy to the proposed project in terms of type of project, project description, and typicality and extent of existing resources and project-specific impacts. The cumulative projects study area was selected to include similarities in land use, habitat types, regional distribution of species, general hydrology, and physical attributes of the land such as topography and soils. In addition to the proposed project, the cumulative project list includes the following: Major Use Permit 11-003 Ace Development Project, Major Use Permit 10-045 Thousand Trails Wireless Telecommunications, Major Use Permit 70-315-07 Pacific Bell Telephone, Major Use Permit 83-054-06 Roman Catholic Bishop of San Diego, Minor Use Permit 96-046-01 T-Mobile, Minor Use Permit 96-048-01 T-Mobile West Corporation, and Minor Use Permit 96-044-01 T-Mobile West Corporation. Project information that has been released to date for these ten projects is available for review at the County DPLU offices.

Of the total cumulative projects, there were no projects within ten miles of the project site. Six of the seven projects are also cellular communication facilities with minimal project related impacts.

The proposed project will result in a total of 0.36 acre of permanent impacts to granitic chamise chaparral and non-native grasslands. As discussed for project-level impacts above, these impacts could result in the temporary displacement of non-listed special-status wildlife species, loss of foraging habitat, and indirect noise-related impacts to nesting birds during the breeding season. Impacts to these two communities will result from the construction and installation of the equipment area and utility line trenching. Impacts to a total of 0.36 acre of granitic chamise chaparral and non-native grasslands represents a measurable loss to these habitats, on a local scale, and is a cumulatively considerable affect when accounted for along with the total cumulative projects. On a regional scale, the permanent loss of 0.36 acre of a sensitive habitat type ~~Tier III habitat~~, that is completely surrounded by higher quality habitat, is not considered a significant impact on a cumulative basis.

Therefore, when considered with the avoidance, minimization, and habitat-based mitigation measures recommended in the cumulative projects, construction of the proposed project will not result in a significant cumulative impact. Additionally, the proposed project's avoidance of individual oak trees within the survey area, and offsite contribution of 0.18 acre of granitic chamise chaparral and non-native grassland habitat, would reduce total cumulative impacts to these habitats and the species it may provide habitat for to less than significant.

SECTION 10: REFERENCES

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SECTION 11: PREPARER AND PERSONS/ORGANIZATIONS CONTACTED

This report was prepared in accordance with the County of San Diego report format and content requirements for biological resources by MBA Biologist Scott Crawford, a County-approved CEQA consultant. If you have any questions or concerns regarding this report, please contact me at 714.508.4100.

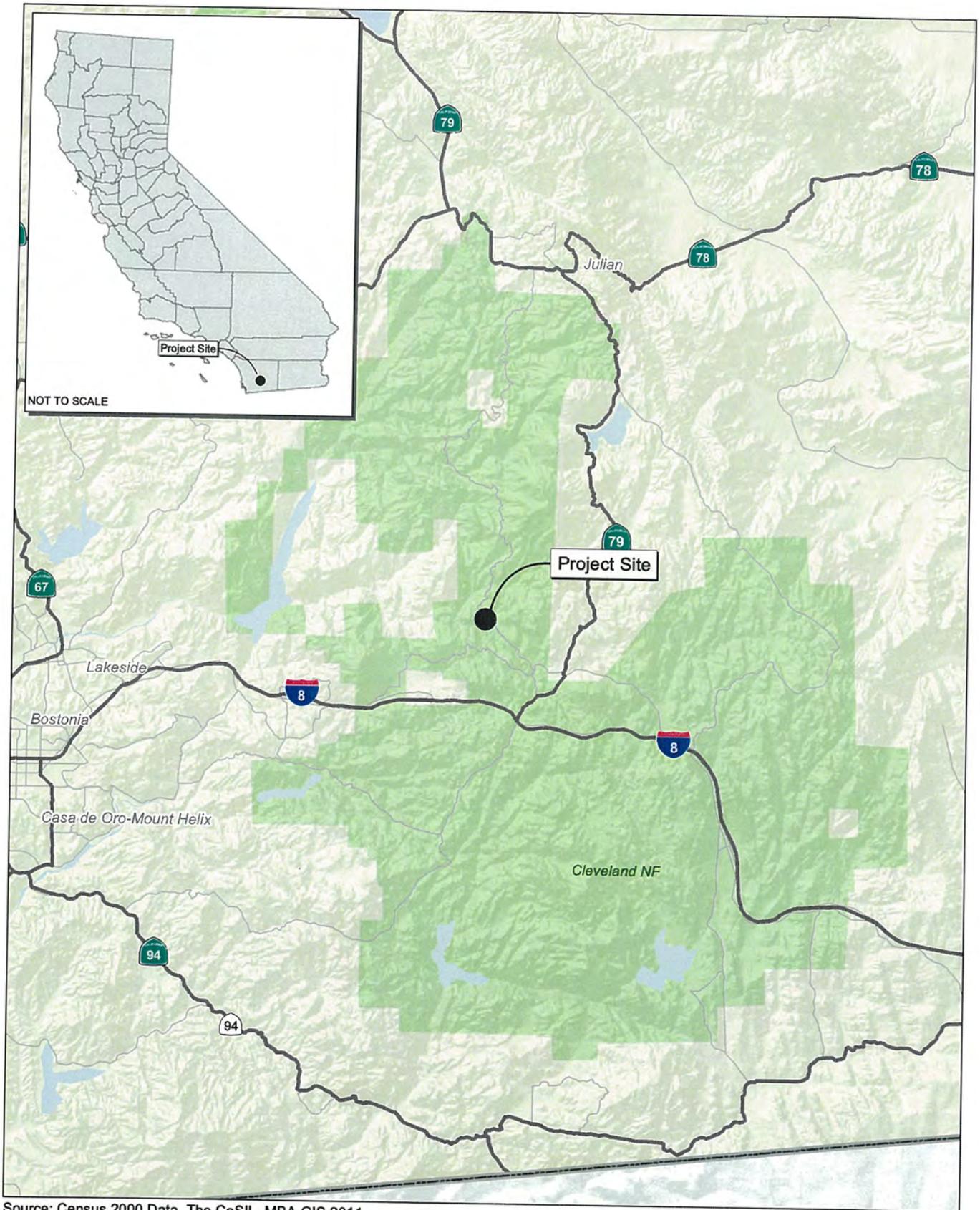
As the responsible County-approved CEQA consultant for this report, I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented are true and correct in my professional opinion and in that of the firm that employs me:

~~October 27, 2011~~
Date: July 30, 2012

Signed:



Scott Crawford, Section Manager of Natural Resources
Michael Brandman Associates
Irvine, CA



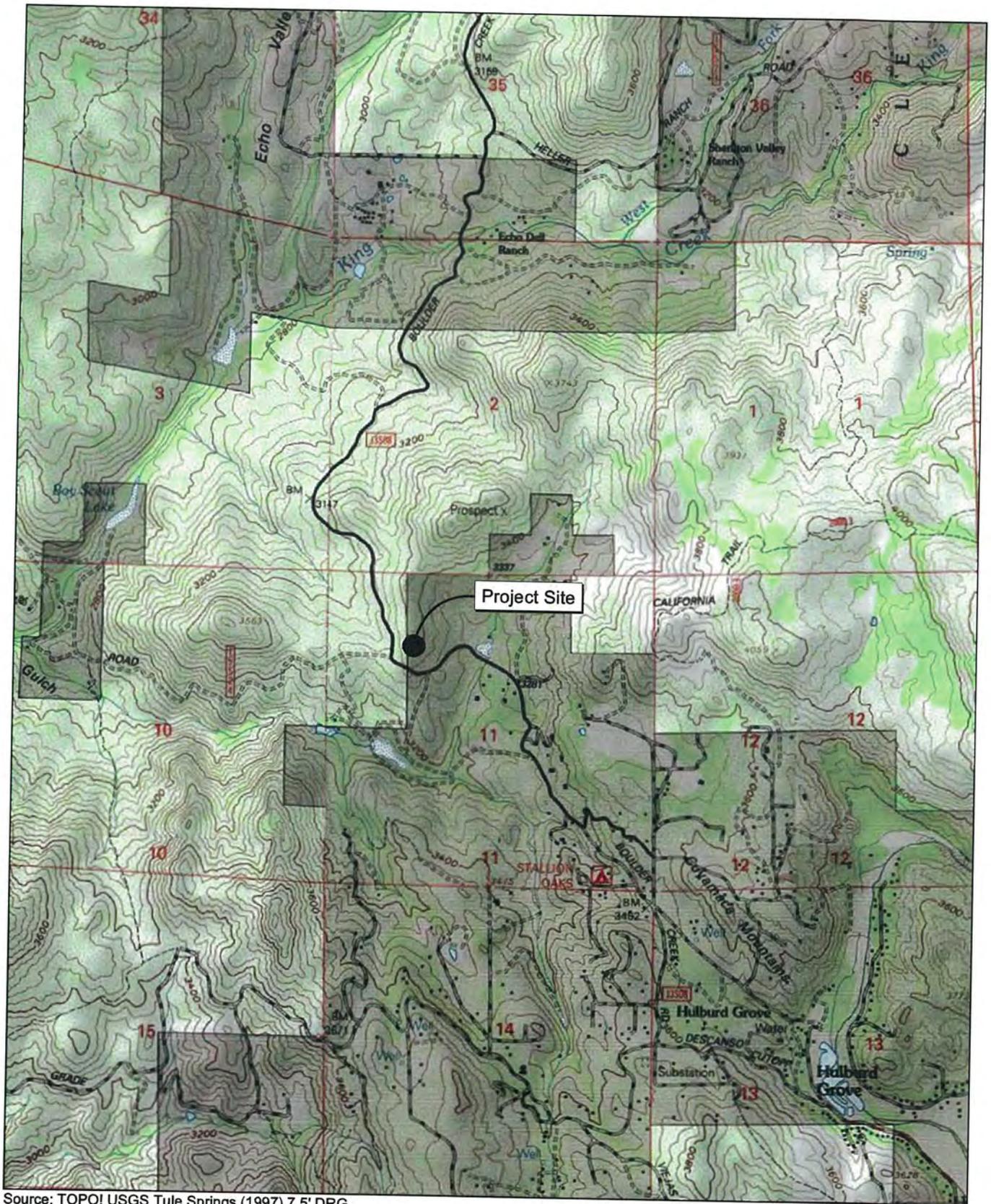
Source: Census 2000 Data, The CaSIL, MBA GIS 2011.



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Exhibit 1 Regional Location Map

ACE ENVIRONMENTAL, LLC • 2CA6009 - BOULDER CREEK
 BIOLOGICAL RESOURCES LETTER REPORT

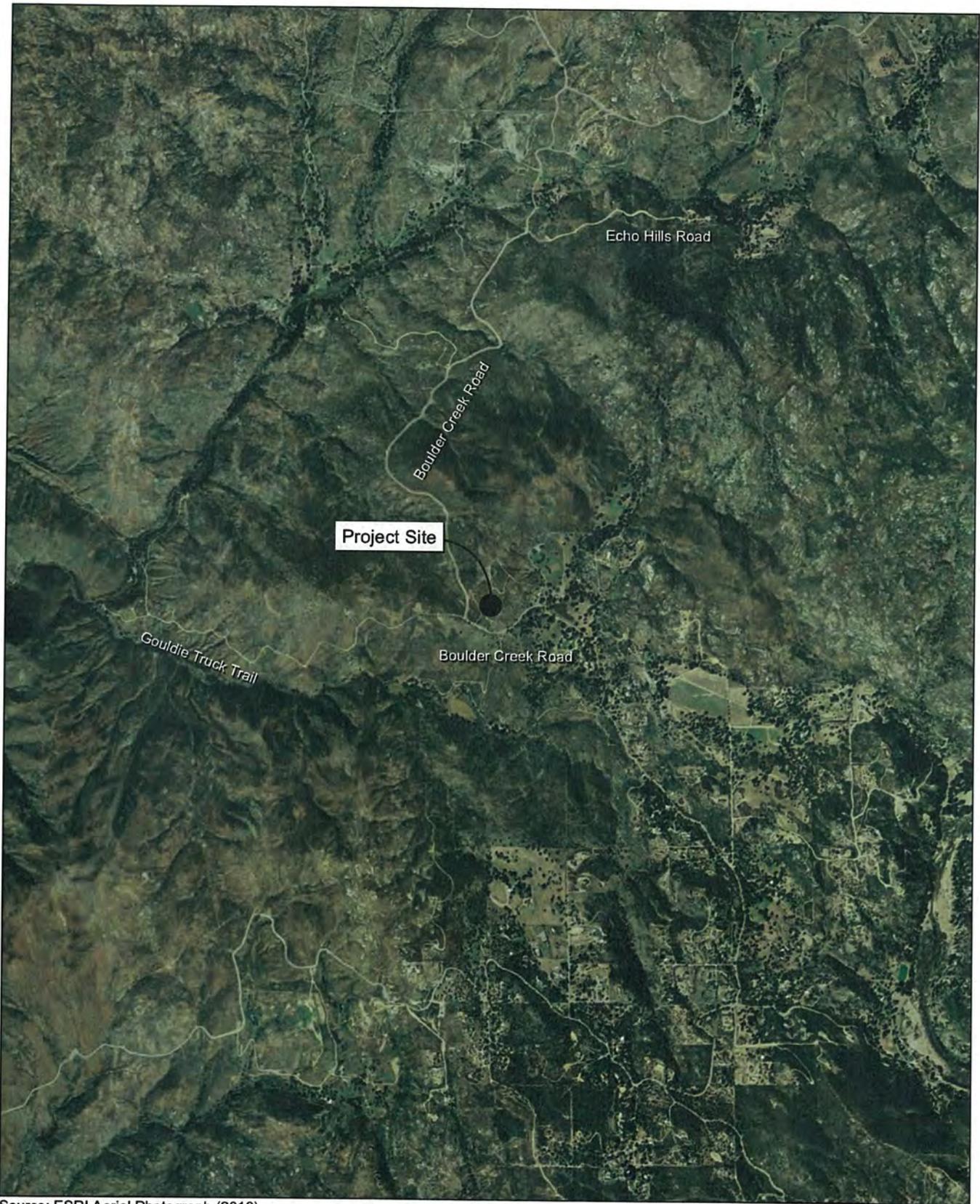


Source: TOPOI USGS Tule Springs (1997) 7.5' DRG.

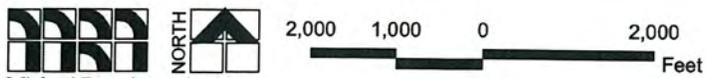


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Exhibit 2
Local Vicinity Map
Topographic Base



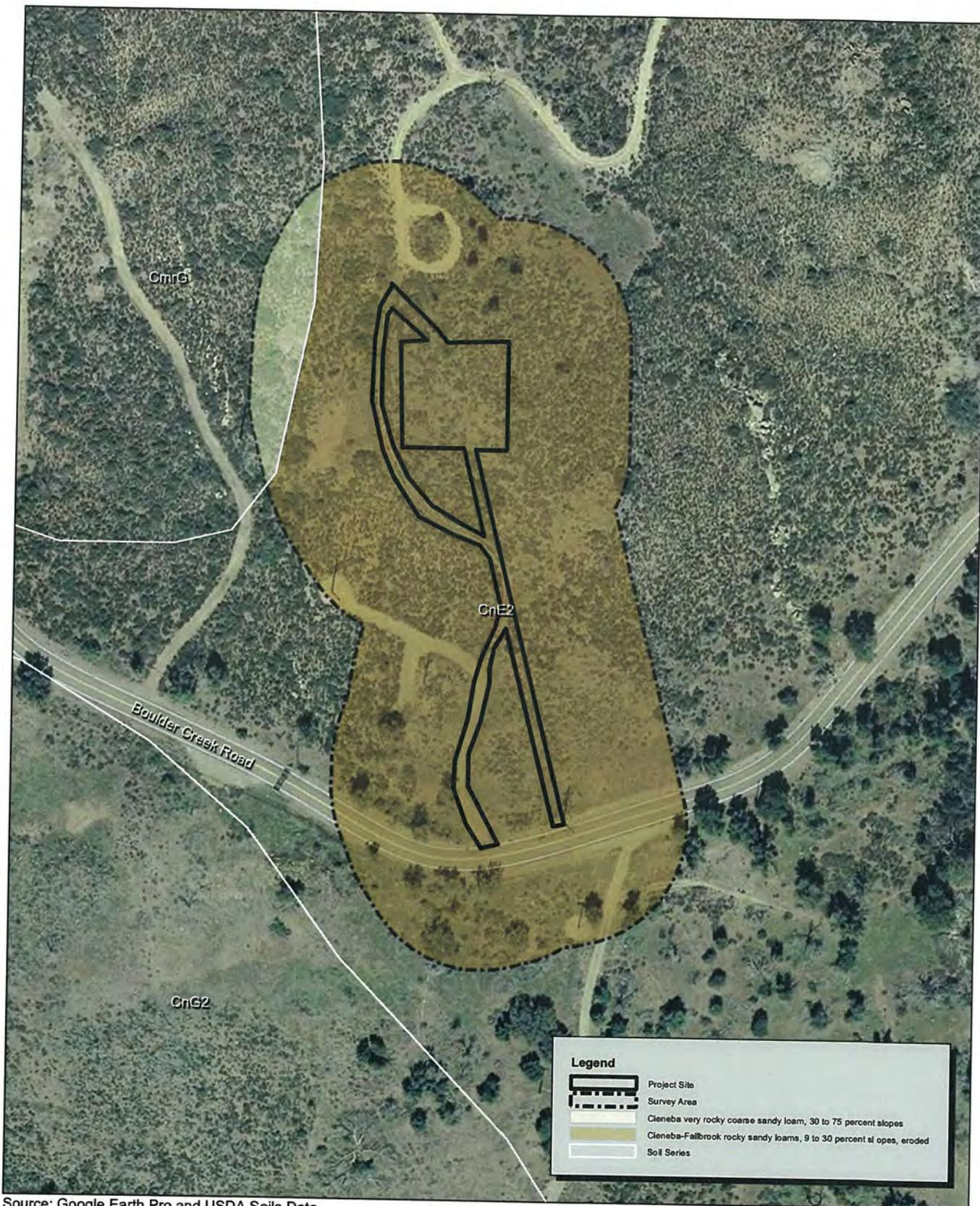
Source: ESRI Aerial Photograph (2010).



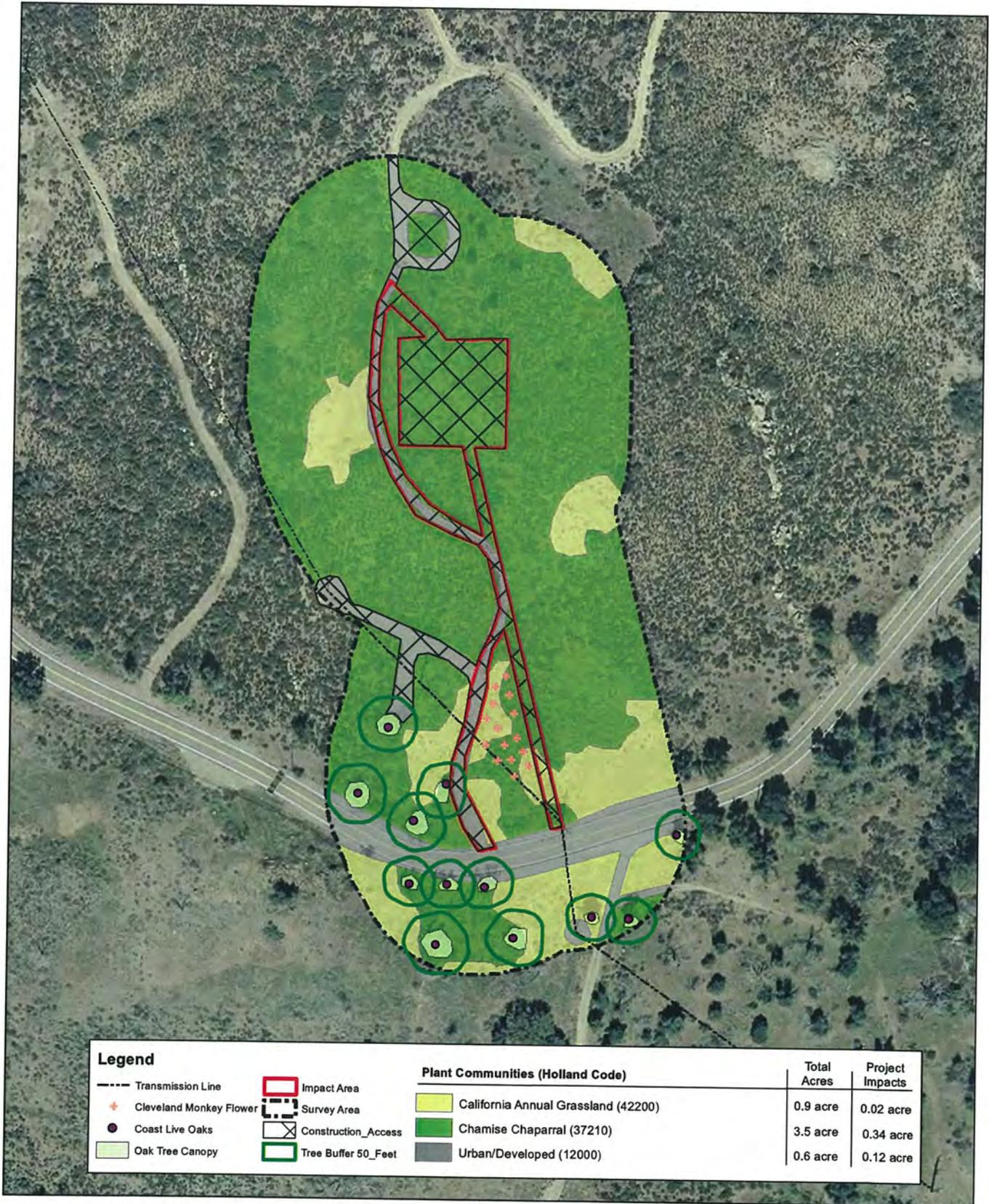
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Exhibit 3 Local Vicinity Map Aerial Base



Source: Google Earth Pro and USDA Soils Data.



Legend		Plant Communities (Holland Code)		Total Acres	Project Impacts
--- Transmission Line	Impact Area	California Annual Grassland (42200)	0.9 acre	0.02 acre	
+ Cleveland Monkey Flower	Survey Area	Chamise Chaparral (37210)	3.5 acre	0.34 acre	
● Coast Live Oaks	Construction_Access	Urban/Developed (12000)	0.6 acre	0.12 acre	
○ Oak Tree Canopy	Tree Buffer 50_Feet				



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Exhibit 5 Biological Resources Map

Attachment A: Floral and Faunal Compendia

FLORAL COMPENDIUM

Gymnosperms	
Pinaceae	Pine Family
C <i>Pinus</i> sp.*	pine
Angiosperms (Dicotyledons)	
Asteraceae	Sunflower Family
B <i>Artemisia californica</i>	California sagebrush
A <i>Encelia californica</i>	California brittlebush
A <i>Heterotheca grandiflora</i>	telegraph weed
Brassicaceae	Mustard Family
A <i>Hirshfeldia incana</i> *	short-pod mustard
Fabaceae	Legume Family
B <i>Lotus scoparius</i>	deerweed
Fagaceae	Oak Family
B <i>Quercus agrifolia</i>	coast live oak
B <i>Quercus engelmannii</i>	Engelmann oak
Geraniaceae	Geranium Family
A <i>Erodium</i> sp.	filaree
Hydrophyllaceae	Waterleaf Family
A <i>Phacelia distans</i>	common phacelia
Myrtaceae	Myrtle Family
C <i>Eucalyptus</i> sp.*	gum tree
Plantaginaceae	Plantain Family
A <i>Penstemon centranthifolius</i>	Scarlet buglar
Polygonaceae	Buckwheat Family
B <i>Eriogonum fasciculatum</i>	California buckwheat
Rosaceae	Rose Family
B <i>Adenostoma fasciculatum</i>	chamise
B <i>Prunus ilicifolia</i>	holly-leaf cherry
Angiosperms (Monocotyledons)	

Poaceae	Grass Family
A <i>Avena barbata</i> *	slender oat
A <i>Bromus madritensis ssp. rubens</i> *	red brome

Plant Community ID Legend

- A – Disturbed Habitat
- B – Oak Woodland
- C – Eucalyptus Woodland/Ornamental
- * Non-Native Species

FAUNAL COMPENDIUM

Invertebrates

Pieridae	Whites, Sulphurs, and Orangetips
B <i>Pieris rapae</i>	Cabbage white

Reptiles

Teiidae	Whiptails
A <i>Aspidoscelis hyperythra</i>	Orange-throated whiptail

Birds

Trochilidae	Hummingbirds
B <i>Calypte anna</i>	Anna's hummingbird

Corvidae	Jays and Crows
D <i>Corvus brachyrhynchos</i>	American crow

Emberizidae	Emberizids
D <i>Pipilo crissalis</i>	California towhee
D <i>Pipilo maculatus</i>	spotted towhee

Fringillidae	Finches
A <i>Carpodacus mexicanus</i>	house finch

Mammals

Sciuridae	Squirrels
A <i>Spermophilus beecheyi</i>	California ground squirrel

Canidae	Wolves and Foxes
A <i>Canis familiaris</i>	domestic dog

Geomyidae	Pocket gophers
A <i>Thomomys bottae</i>	Botta's pocket gopher

Plant Community ID Legend

- A - Disturbed Land
- B - Oak Woodland
- C - Eucalyptus Woodland/Ornamental
- D - Other (Call Detection, In-Flight Observation, Sign)

Attachment B-1: Special-Status Plant Species Table

Special Status Plant Species Table

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
<i>Astragalus oocarpus</i>	San Diego milkvetch	—	—	1B.2	List A	Cismontane chaparral edges at the periphery of meadows on rough coarse sandy loams, typically with mild soil disturbance. Known Elevation Limits: 305 - 1524	Perennial herb	May – Aug	Not Likely to Occur No suitable meadow habitat occurs within the project site. The closest recorded occurrence is within 2 miles southeast of the project site.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	—	—	1B.1	List A	Closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools in mesic environments supported by clay and sometimes serpentine soils. Known Elevation Limits: 30 - 1692 m.	Bulbiferous herb	May – Jul	Not Likely to Occur The survey area is primarily characterized by disturbed habitat and does not support suitable habitat for this species. There are no recorded occurrences within 3 miles of the project site. No portions of the survey area are characterized by forests, chaparral, cismontane woodlands, or vernal pools. The survey area does not contain clay or serpentine soils. This herb was not observed during the June 2008 habitat assessment survey.
<i>Chorizanthe leptotheca</i>	Peninsular spine flower	—	—	4.2	List A	Xeric openings in chamise chaparral. Also within coastal sage scrub and lower montane coniferous	Annual herb	May – Aug	Not Likely to Occur The survey area is primarily characterized by chamise chaparral with a dense

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
						forest. Granitic soils and substrates associated with alluvial fans in inland areas. Known Elevation Limits: 300 – 1,900 m			buckwheat component and does not support suitable habitat for this species. No portions of the survey area contain chamise chaparral or coastal sage scrub. The survey area does not support substrates associated with alluvial fans. This annual herb was not observed during the June 2008 habitat assessment survey.
<i>Clarkia delicata</i>	Campo clarkia	—	—	1B.2	List A	Occurs in the periphery of oak woodlands and cismontane chaparral haunts. Known to occur in Bancas stony loam. Locales where observed were partially shaded by tree canopy or large shrubs, and typically were vernal mesic situations with substantial peripheral annual and herbaceous spring growth. Known Elevation Limits: 235 – 1000 m	Annual herb	Apr – Jun	Not Likely to Occur. The survey area is primarily characterized by chamise chaparral and does not support suitable habitat for this species. No portions of the survey area are characterized by cismontane chaparral nor a vernal mesic site. The impact area does occur on the periphery of a few scattered oak trees, however, the site does not support the associated soil series for this species and is likely too xeric. This annual herb was not observed during the June 2011 habitat assessment survey.
<i>Saltugilia caruifolia</i>	Caraway leaved gilia	—	—	4.3	List A	Sandy openings in lower montane coniferous forest and	Annual herb	May – Aug	Not Likely to Occur The survey area is primarily

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
						chaparral. Known Elevation Limits: 840 – 2,300 m			characterized chamise chaparral and does not support suitable habitat for this species. No portions of the survey area contain chamise chaparral or coastal sage scrub. The survey area does not support substrates associated with sandy soils. This annual herb was not observed during the June 2011 habitat assessment survey.
<i>Mimulus clevelandii</i>	Cleveland's monkey flower	—	—	4.2	List D	Xeric openings in chamise chaparral. Also within coastal sage scrub and lower montane coniferous forest. Gabbroic soils and often in disturbed areas, openings, or rocky outcrops. Known Elevation Limits: 450-2000 m	Perennial rhizomatous herb	Apr-June	Present This species was observed along the proposed trench route. This species is considered present within the project site.
<i>Mimulus diffuses</i>	Palomar monkey flower	—	—	4.3	List A	Sandy openings in lower montane coniferous forest and chaparral. Known Elevation Limits: 1,220 – 1,830 m	Annual herb	Apr-June	Not Likely to Occur The survey area is below the known elevational limits of this species and therefore is not likely to occur on site. This annual herb was not observed during the June 2011 habitat assessment survey.

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
<i>Monardella hypoleuca lanata</i>	Felt leaved rock mint	—	—	1B.2	List A	Usually occurs in the understory of chaparral, beneath mature stands of chamise in xeric situations. Known to occur with <i>Pedicularis densiflora</i> . Associated soils include San Miguel-Exchequer rocky silt loam and Acid Igneous rock lands. Known Elevation Limits: 300 – 1575 m	Rhizomatous herb	Jun – Aug	Not Likely to Occur The survey area does not support the known vegetation associations or soils for this species. This herb was not observed during the June 2011 habitat assessment survey.
<i>Pentachaeta aurea</i>	Golden-rayed pentachaeta	—	—	4.2	List A	Found in a variety of habitats including chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, and valley and foothill grassland Known Elevation Limits: 80 – 1850 m	Annual herb	Mar-June	Low Potential to Occur Marginally suitable habitat occurs on site. This annual herb was not observed during the June 2011 habitat assessment survey.
<i>Quercus engelmannii</i>	Engelmann oak	—	—	4.2	List A	Commonly found in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland Known Elevation Limits: 50 – 1,300 m	Perennial deciduous tree	Mar-Jun	Not Likely to Occur The survey area is primarily characterized by chamise, buckwheat, and deerweed. This site does not support suitable habitat for this species

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
<i>Packera gandeir</i>	Gander's butterweed	—	—	1B.2	List A	Commonly found in chaparral and lower montane coniferous forests with sandy openings. Known Elevation Limits: 300 – 1,900 m	Annual herb	May – Aug	Not Likely to Occur The survey area is primarily characterized by granitic chamise chaparral and does not support suitable habitat for this species. This annual herb was not observed during the June 2011 habitat assessment survey.
U.S. Fish and Wildlife Service FE Federal Endangered FT Federal Threatened PE Proposed Endangered PT Proposed Threatened FC Federal Candidate FSC Species of Concern* *No longer recognized as a federal designation.		California Department of Fish and Game CE California Endangered CT California Threatened CR California Rare				California Native Plant Society 1A Plants presumed extinct in California. 1B Plants rare, threatened, or endangered in California and elsewhere. 2 Plants rare, threatened, or endangered in California, but more common elsewhere. 3 Plants in need of more information. 4 Plants of limited distribution. ** No Longer Recognized as Sensitive by CNPS San Diego County Sensitive: San Diego County List A San Diego County List B San Diego County List C San Diego County List D			
<p>Not Likely to Occur – There are no present or historical records of the species occurring on or in the immediate vicinity, (within 3 miles) of the survey area and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the survey area.</p> <p>Low Potential to Occur – There is a historical record of the species in the vicinity of the survey area and potentially suitable habitat on the survey area, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The survey area is above or below the recognized elevation limits for this species.</p> <p>Moderate Potential to Occur – The diagnostic habitats associated with the species occur on or in the immediate vicinity of the survey area, but there is not a recorded occurrence of the species within the immediate vicinity (within 3 miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.</p> <p>High Potential to Occur – There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the survey area (within 3 miles).</p> <p>Species Present – The species was observed on the survey area at the time of the survey or during a previous biological survey.</p>									

Attachment B-2: Special-Status Wildlife Species Table

Special Status Wildlife Species Table

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Insects							
<i>Danaus plexippus</i>	Monarch butterfly	—	—	Group 2	—	A predominant open county, frost intolerant species whose range of breeding habitat is greatly dependent upon the presence of asclepiad flora (Milkweeds). Requires dense tree cover for overwintering. Also associated with Eucalyptus trees	Not Likely to Occur. None of this species host plants were observed within the survey area. This species is not likely to use the survey area during its larval stage due to lack of host plants. The survey area provides limited foraging opportunities and nectar sources. This species is not likely to forage within the impact area during the flight season.
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE	—	Group 1	—	Known to occur in clay soil meadows, native and non-native grasslands, coastal and semi-desert scrubs, and chaparrals with canopy openings supported by clay or cryptogamic crusts. As a vital habitat component, this species requires the presence of host plants in the families Plantaginaceae and Scrophulariaceae; most commonly dwarf plantain (<i>Plantago erecta</i>) and purple owl's-clover (<i>Castilleja exserta</i>).	Not Likely to Occur. None of this species host plants were observed within the survey area. This species is not likely to use the survey area during its larval stage due to lack of host plants. The survey area provides limited foraging opportunities and nectar sources. This species is not likely to forage within the impact area during the flight season.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
<i>Lycaena hermes</i>	Hermes copper butterfly	—	—	Group 1	—	Found in southern mixed chaparral and coastal sage scrub at western edge of Laguna Mountains.	Low Potential to occur. A single host plant was observed onsite within the vicinity of buckwheat plants. This species occurs within the survey area. The survey area occurs near the community of Ramona and does not occur on the edge of the Laguna Mountains. No portions of the survey area are currently characterized by mixed chaparral or coastal sage scrub.
Reptiles and Amphibians							
<i>Crotalus ruber ruber</i>	Northern red diamond rattlesnake	—	—	Group 2	—	Occurs from coastal San Diego County to the eastern slopes of the mountains and in desert habitats. Occurs from sea level to 900 meters in chaparral, woodland, and arid desert habitats in rocky areas and dense vegetation.	Not likely to Occur The project site is above the known elevation range for this species. Some marginally suitable habitat occurs on site.
<i>Diadophis punctatus similis</i>	San Diego ringneck snake	—	—	Group 2	—	Wet meadows and moist rocky hillsides, gardens, farmlands, grassland, chaparral, mixed coniferous forests, and woodlands.	Low Potential to Occur Marginal quality habitat occurs onsite.
<i>Ensatina eschscholtzii klauberi</i>	Large-blotched salamander					Known to occur in coastal dunes, CSS, chaparral, oak woodland, and conifer forests, within shady canopy with extensive leaf litter, typically on north-facing slopes or woodlands, will seek refuge under rocks, logs, leaf litter, and boards.	Not likely to Occur No suitable habitat occurs within the project site.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
<i>Phrynosoma coronatum blainvillei</i>	San Diego horned lizard	—	SSC	Group 2	—	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions and prefers friable, rocky, or shallow sandy soils.	Low Potential to Occur. The survey area contains marginal substrates for this species and likely supports an adequate prey base (ants) due to the existing residence. This species has a low potential to forage within the proposed impact area.
<i>Scaphiopus hammondii</i>	Western spadefoot toad	—	SSC	Group 2	—	Found in coastal sage scrub, chaparral, and grassland habitats, but most common in grasslands with vernal pools or mixed grassland/CSS habitats.	Not Likely to Occur. This species preferred habitat does not occur within the survey area.
Avian							
<i>Accipiter cooperi</i>	Cooper's hawk	—	—	Group 1	—	(Nesting) Open, uninterrupted, or marginal type woodlands. Nest sites in riparian growths of deciduous trees, live oaks. Also other various forest habitats that are near water. Dense woodlands and forests are primary foraging habitat for this accipiter.	Low Potential to Occur. Marginal nesting habitat and foraging habitat occur within the survey area for this species. Existing anthropogenic disturbances associated with the adjacent access road would likely deter this species from nesting in the area.
<i>Accipiter striatus</i>	Sharp-shinned hawk	—	—	Group 1	—	(Nesting) Open, uninterrupted, or marginal type woodlands. Nest sites in riparian growths of deciduous trees, live oaks. Also other various forest habitats that are near water. Dense woodlands and forests are primary foraging habitat for this accipiter.	Low Potential to Occur. Marginal nesting habitat and foraging habitat occur within the survey area for this species. Existing anthropogenic disturbances associated with the existing access roads would likely deter this species from nesting in the area.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
<i>Aquila chrysaetos</i>	Golden eagle	—	FP	Group 1	—	(Nesting and Wintering) Rolling foothills and mountain areas, juniper-sage flats, and deserts. Primarily associated with cliff-walled canyons and large trees in open habitats for nesting. Shrub-steppe and native grassland communities provide important foraging habitat. Also carrion.	Not Likely to Occur. No suitable nesting habitat for this species occurs within the survey area due to lack of suitable cliff habitat and large trees in open areas. Marginally suitable foraging opportunities occurs within limited portions of the survey area; however, existing anthropogenic disturbances would likely deter this species from utilizing the area.
<i>Buteo lineatus</i>	Red-shouldered hawk	—	—	Group 1	—	Red-shouldered hawks usually inhabit mature deciduous or mixed deciduous-conifer forests and swamps. They build their nests 6 to 15 meters (20 to 60 feet) above the ground in the branches of deciduous trees in wet woodland areas. They prefer to have dead trees nearby, where they can perch and enjoy an unobstructed view of the forest floor.	Low Potential to Occur. Marginal nesting habitat and foraging habitat occur within the survey area for this species. Existing anthropogenic disturbances would likely deter this species from nesting in the area.
<i>Cathartes aura</i>	Turkey vulture	—	—	Group 1	—	Found in open country, woodlands, and near farms.	Low Potential to Occur. Marginally suitable foraging or nesting habitat occurs on or in the immediate vicinity of the survey area for this species.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
<i>Sialia mexicana</i>	Western bluebird	—	—	Group 2	—	Uncommon within woodlands, scrublands, farmlands, and orchards. Open oak woodlands in higher elevations. Nests tree cavities. Winters in desert regions often associated with mesquite-mistletoe groves.	Low Potential to Occur. Marginal nesting and foraging habitat occurs within the oak woodland located within and in the immediate vicinity of the survey area. This species has a low potential to forage within the impact area.
Mammals							
<i>Antrozous pallidus</i>	Pallid bat	—	SSC	Group 2	—	Roosts in crevices, caves, mine shafts, bridges, buildings and tree hollows. Forages on insects in wide variety of habitats.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
<i>Bassariscus astutus</i>	Ringtail	—	—	Group 2	—	Chaparral, rocky ridges and cliffs near water.	Not Likely to Occur. This species may roam through the general vicinity of the survey area however the survey area itself does not provide the preferred habitat for this species. There are no rocky ridges or cliffs near water on or in the vicinity of the survey area. Existing anthropogenic disturbances would likely deter this species from utilizing the site.
<i>Chaetodipus californicus femoralis</i>	Dulzura California pocket mouse	—	SSC	Group 2	—	Variety of habitats including coastal scrub, chaparral, and grasslands in San Diego County. Associated with grass-chaparral edges.	Low Potential to Occur. Marginal habitat occurs within the project site, but not a significant amount to establish a population.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	—	SSC	Group 2	—	Found in coastal scrub, chaparral, grasslands, and sagebrush, among other habitat types, in western San Diego County.	Low Potential to Occur. Marginal habitat occurs within the project site, but not a significant amount to establish a population.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	—	SSC	Group 2	—	Desert scrub and coniferous forest. Roosts in caves or abandoned mines, occasionally in buildings.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
<i>Eumops perotis californicus</i>	Greater western mastiff bat	—	SSC	Group 2	—	Rocky areas and cliff faces. Roosts in cliff crevices and buildings.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
<i>Felis concolor</i>	Mountain lion	—	—	Group 2	—	Uses rocky areas, cliffs, and ledges that provide cover within open woodlands and chaparral, as well as riparian areas that provide protective habitat connections for movement between fragmented core habitat. Also, need both vertical and horizontal cover components, such as rocks and downed logs, to feel secure enough to bed.	Not Likely to Occur. This species may roam through the general vicinity of the survey area however, the survey area itself does not provide primary denning or foraging opportunities. Existing anthropogenic disturbances would likely deter this species from utilizing the site.
<i>Lasiurus blossevillii</i>	Western red bat	—	—	Group 2	—	Roosts primarily within trees throughout a wide range of habitat, from sea level to mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected by dense canopies and have open areas in the understory for foraging.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
<i>Lepus californicus bennettii</i>	Black-tailed jackrabbit	—	—	Group 2	—	Open desert scrub with suitable cover and burrowing substrate. Burrows beneath desert shrubs and loose friable soils.	Low Potential to Occur. No suitable burrowing habitat or primary foraging habitat occurs within the survey area. This species has a low potential to forage within impact area.
<i>Myotis ciliolabrum</i>	Small-footed myotis	—	—	Group 2	—	Wide range of habitat types however primarily within arid wooded and brushy uplands, including open stands in forests and woodlands, adjacent to water. Caves, buildings, mines, and crevices used for refuge.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
<i>Myotis evotis</i>	Long eared myotis	—	—	Group 2	—	Found in all brush, woodland and forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands and forests. Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
<i>Myotis thysanodes</i>	Fringed myotis	—	—	Group 2	—	Found in a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer. Uses caves, mines, buildings, or crevices for maternity colonies and roosts.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
<i>Myotis volans</i>	Long legged myotis	—	—	Group 2	—	Found in brush, woodland, and forest habitats above 4,000 ft, especially coniferous woodlands and forests. Uses trees for day roosts, and caves and mines for night roosts. Nursery colonies under bark or in hollow trees, also crevices or buildings.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur. The area is below this species known elevation range.
<i>Myotis yumanensis</i>	Yuma myotis	—	—	Group 2	—	Uses open water near woodlands and forests. Maternity colonies in caves, mines, buildings, or crevices.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
<i>Nyctinomops femorosaccus</i>	Pocketed free-tailed bat	—	SSC	Group 2	—	Occurs in arid areas associated with Pine-Juniper woodlands, desert scrub, palm oasis, desert wash, and desert ripa. Specifically in rocky areas with high cliffs.	Not Likely to Occur. No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
<i>Odocoileus hemionus</i>	Southern mule deer	—	—	Group 2	—	Mule deer occupy a wide range of habitat types within their home range. In San Diego County, this species prefers more arid, open situations.	Not Likely to Occur. This species may roam through the general vicinity of the survey area however the survey area itself does not provide primary foraging opportunities. Marginally suitable foraging habitat occurs within limited portions of the survey area, however the impact area itself does not provide suitable resources. Existing anthropogenic disturbances would likely deter this species from utilizing the site.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
<i>Taxidea taxus</i>	American badger	—	SSC	Group 2	—	Prefers herbaceous, shrub, and open stages of most habitats with dry, friable soils. Preys on burrowing rodents.	<p>Not Likely to Occur.</p> <p>This species may roam through the general vicinity of the survey area however, the survey area itself does not provide primary denning or foraging opportunities. Marginally suitable foraging habitat occurs within limited portions of the survey area, however the impact area itself does not provide suitable resources. Existing anthropogenic disturbances would likely deter this species from utilizing the site.</p>
Federal		State		Other			
FE	Federal Endangered	SE	State Endangered	Other			
FT	Federal Threatened	ST	State Threatened	San Diego County Group 1			
PFT	Proposed Federal Threatened	SSC	California Species of Concern	San Diego County Group 2			
C	Candidate for Federal Listing	FP	Fully Protected Species	BLM: Sensitive			
				G Global Ranking Rarity			
				S State Ranking Rarity			
<p>Not Likely to Occur - There are no present or historical records of the species occurring on or in the immediate vicinity, (within 3 miles) of the survey area and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the survey area.</p> <p>Low Potential to Occur - There is a historical record of the species in the vicinity of the survey area and potentially suitable habitat on the survey area, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The survey area is above or below the recognized elevation limits for this species.</p> <p>Moderate Potential to Occur - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the survey area, but there is not a recorded occurrence of the species within the immediate vicinity (within 3 miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.</p> <p>High Potential to Occur - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the survey area (within 3 miles).</p> <p>Species Present - The species was observed on the survey area at the time of the survey or during a previous biological survey.</p>							

Attachment C: Site Photographs



Photograph 1 - Looking northeast at the proposed project site from an existing utility line pole. The proposed project will be installed just below the large shrubs at the top of the hill. Evidence of the 2007 fire is still present, but natural revegetation has progressed well over the last few years. Vegetation is dominated by chamise with scattered buckwheat.



Photograph 2 - Looking east at the proposed project site from the existing dirt access road. The proposed project will be installed just before the large shrubs at the edge of the ridge line. Vegetation in this area is dominated by deer weed and slender oats.



Photograph 3 - Looking northeast at the proposed project site from the existing dirt access road. This area contains a dense stand of non-native grassland with scattered buckwheat.



Photograph 4 - Looking south at the proposed utility trench route. The route will cross the photo from left to right and will terminate at the utility pole at the left of the photograph. Boulder Creek Road is at the bottom of the hill with the scattered oak trees.

Attachment D: CNDDDB Field Survey Form

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811

Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 06/14/2011

For Office Use Only

Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Mimulus clevelandii*

Common Name: Cleveland monkey flower

Species Found? Yes No _____ If not, why?

Total No. Individuals 15 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Scott Crawford

Address: 220 Commerce, Suite 200
Irvine, CA 92602

E-mail Address: Scrawford@brandman.com

Phone: (714) 742-5316

Plant Information

Phenology: 70% vegetative 30% flowering 0% fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: San Diego

Landowner / Mgr.: Ace Development, LLC

Quad Name: Tule Springs

Elevation: 3,200

T 15 south R 3 West Sec 11, NE $\frac{1}{4}$ of NW $\frac{1}{4}$, Meridian: H M S

Source of Coordinates (GPS, topo. map & type): MAP

T _____ R _____ Sec _____, _____ $\frac{1}{4}$ of _____ $\frac{1}{4}$, Meridian: H M S

GPS Make & Model _____

DATUM: NAD27 NAD83 WGS84

Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 533100 3638437

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Chamise Chaparral with buckwheat and deer weed. Plant was found in open canopy area surrounded by more dense stands of vegetation. Soils were cobbly sandy loam.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Open space adjacent to existing transmission line right of way

Visible disturbances: Dirt access road adjacent to occurrence.

Threats: Proposed development for church camps

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): Jepson manual
- Compared with specimen housed at: _____
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: _____

Photographs: (check one or more) Slide Print Digital
Plant / animal
Habitat
Diagnostic feature

May we obtain duplicates at our expense? yes no



Education

M.A., Biological Science, California State University, Fullerton

B.A., Environmental Biology, California State University, Northridge

Professional Registrations

Collection Permit: 801034-02 7/09

Flat-Tailed Horned Lizard 6/2001

Wetland Training Institute 12/1998

Desert Tortoise Council Workshop 10/1999

Desert Tortoise Egg Handling/Artificial Burrow construction 10/1999

Managing Multiple Project Objectives and Deadlines, Skill Path 1/2006

Registered Wildlife Biologist – San Diego County- 3/2006

LAX Security Clearance/Driving Clearance – 2001

FEDERAL PERMIT # TE019947-03, California gnatcatcher, Quino Checkerspot Butterfly, Listed Fairy Shrimp

Federal Energy Regulatory Commission – Environmental Compliance workshop New Orleans, LA 1997 & Las Vegas, NV2007

Experience Summary

Since 1994 Mr. Crawford has obtained experience conducting herpetological, mammalian and avian surveys in Southern California. He is experienced in conducting jurisdictional delineation surveys, wildlife surveys, and sensitive plant surveys. Mr. Crawford has a federal permit to conduct surveys for the California Gnatcatcher, Quino Checkerspot Butterfly and listed fairy shrimp species. He also possesses extensive experience in conducting surveys for other sensitive wildlife species including El Segundo Blue Butterfly, Red-Legged Frog, Arroyo Toad, Least Bell's Vireo, Western Spadefoot, Western Pond Turtle and Burrowing Owl. Mr. Crawford is well-seasoned in GIS (Geographic Information Systems) and vegetation mapping. In addition to his years of fieldwork, Mr. Crawford is experienced in preparing biological sections for General Plans, Specific Plans and EIRs. He participated in third-party reviews for both cities and counties. Along with preparing and reviewing written documents, Mr. Crawford is a practiced technical expert for public hearings including City Council Meetings, Planning Commission meetings and County Board of Supervisors. Mr. Crawford currently assists in the management of the natural resource team at MBA. He is primarily responsible for company wide training of biology staff throughout California.

Recent Project Experience

Biological Resources Assessments

Biological Resources Assessment/Focused Species Surveys/Wetland Delineation, Green Park Ranch, City of Simi Valley. Conducted a biological resources assessment and wetland delineation on a 1600-acre site in the City of Simi Valley. The survey was conducted to document the existing site conditions and to delineate the jurisdictional limits of United States Army Corps of Engineers waters of the U.S. and California Department of Fish and Game waters of the state. Assisted in preparing the Runkle Canyon Specific Plan and reviewed the EIR prepared by Impact Sciences. Participated in public hearings and coordination with City Staff to reduce environmental impacts. (2000-present)

Biological Resources Assessment/SEATAC Review, Quail Lake Project. Conducted spring surveys for a proposed project with SEA #58 south of Quail Lake. Prepared the final Constraints analysis for submittal to the SEATAC for review and recommendation. Coordinated project design to reduce amount of potentially significant impacts. (2002-2005)

Biological Resources Assessment/Wetland Delineation, City of Bakersfield, Kern County. Conducted wetland delineation for a proposed off-road vehicle use park with a 7,000 acres project site. The biological resource assessment and delineation were conducted to determine the existing conditions within the site prior to preparation of the CEQA document. The project site was heavily grazed for many decades and included several upland swales and meandering drainage features within intermittent bed and bank features. (2005-2006)



Sensitive Species Surveys

Riverside Fairy Shrimp Protocol Survey, Runkle Canyon, City of Simi Valley. Conducted protocol dry season surveys for the federally endangered Riverside Fairy Shrimp. The surveys were conducted on several small ponded areas. *Branchinecta lindahli* individuals were observed.

Southwestern Pond Turtle Habitat Assessment, Los Angeles Department of Public Works. Assisted in habitat assessment for the southwestern pond turtle in five locations within the upper west fork and east fork of the San Gabriel River system. The surveys consisted of walking the stream course and evaluating suitable aquatic habitat as well suitable refugia and basking sites.

Santa Susana Tarplant (*Hemizonia minthornii*) Focused Plant Survey, Sprint PCS, City of Chatsworth. Conducted a 100% coverage survey for the Santa Susana tarplant. The site was located within an existing water tank facility that has previously mitigated for impacts to the species. The plants were mapped and project redesign was recommended to avoid impacts to the species.

El Segundo Blue Butterfly Block Counts, Los Angeles World Airport. Assisted in the block counts for the El Segundo Blue Butterfly. Each block was systematically surveyed and all butterflies observed were counted. Field experience gained during the survey allowed Mr. Crawford to obtain an individual 10A(1)a permit.

Wetland Delineation

Pala Road Expansion Wetland Delineation, City of Temecula. Conducted a jurisdictional delineation along the northern side of Pala Road. The project include the expansion of Pala Road (recently changed to Pechanga Parkway), with the City of Temecula. 2002

Wetland Delineation. Level 3. Conducted wetland determinations for all drainages within the vicinity of a proposed fiber-optic cable right-of-way. The determination was conducted from the City of Tehachapi to Bakersfield along farm roads and railroad right-of-ways and also from the City of San Luis Obispo to the City of Santa Barbara. The information was used by the project engineers to determine exact location of the right-of-way. 1997-1998

General Plan Update

City of Perris General Plan Update. Prepared the biological resources section of the City of Perris General Plan Update. Conducted a complete survey and evaluation of all property within the City limits. 2002

City of Rancho Santa Margarita General Plan Update. Prepared the biological resources section of the City of Rancho Santa Margarita General Plan Update. Conducted a complete survey and evaluation of all property within the City limits. 2001

City of Chino, Subarea 2 General Plan. Assisted in the preparation of the biological resources section of the City of Chino, Subarea 2 General Plan. Conducted a complete vegetation map and jurisdictional delineation over the entire General Plan area. 2002

