Heatherglen Planned Development, TTM 17604, CUP 15-006

Initial Study – Mitigated Negative Declaration

Appendix E – Focused Nesting Season Burrowing Owl and Raptor Nest Survey



FOCUSED NESTING SEASON BURROWING OWL AND RAPTOR NEST SURVEY REPORT FOR THE HEATHER GLEN PRJOJECT, SAN BERNARDINO COUNTY, CALIFORNIA

±60 Acre Property, ±60 Acres Surveyed

APNs 1210-211-18, 21, 23, and 1210-281-01, 02, 03, and 04, Tract 17604, East Highland Area, Section 2, Township 1 South, Range 3 West, USGS Redlands 7.5' Quadrangle

Prepared for:

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Report Summary:

No burrowing owl (BUOW), recently occupied burrows, or BUOW sign (pellets, scat, feathers, tracks, etc.) were observed on the subject property or within the 150 meter buffer area. Although no BUOW or BUOW sign was observed during the present study, habitat to support this species may be present on the western approximately one-third of the subject property where California ground squirrel activity is present. An additional 30-day preconstruction survey is recommended for this species. Based on the results of the raptor nest survey, several potential nest sites (currently presumed inactive) are present within the *Eucalyptus* groves at the northwestern portion of the site. Based on observations during this study, red-shouldered hawks may have utilized one or more of these nest sites in early 2005. Although potential raptor nests were observed, no observations indicating current use were noted during the present study. If habitat disturbance will occur during the nesting season a 30-day preconstruction survey for actively nesting raptors is recommended. Two USGS mapped blueline drainages cross the site.

Surveys conducted by: Guy Bruyea
Surveys conducted on: July 11, 12, 13, 16, 17, and 19, 2005
Report Date: September 19, 2005

SIGNED:		Guy Bruyea, Biologist
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EXECUTIVE SUMMARY

A focused survey for the burrowing owl (*Athene cunicularis*) and a focused raptor nest survey were conducted on North American Residential Communities, Inc.'s site within the County of San Bernardino, California. The purpose of these studies was to identify burrowing owls, owl burrows, or other burrowing owl sign and identify presence/absence of raptor nests and potential habitat within the boundary of the project site and a 150 meter buffer zone.

The project site was surveyed for owls, potential burrows, and other sign during the Phase II burrow survey. The burrow survey did not identify any burrowing owls, burrows (either active or inactive), or other sign (i.e., tracks, feathers, pellets, prey remains, eggshells, etc.) indicating presence during the present survey, either on the site or within the 150 meter impact buffer zone. L&L has determined this species is currently absent from the project site and has not occupied the site recently.

The western one-third (approximately) of the subject property does support suitable habitat for the burrowing owl where California ground squirrel activity is present. An additional 30-day preconstruction survey is recommended for this species.

Based on the results of the raptor nest survey, several potential nest sites (currently presumed inactive) are present within the Eucalyptus groves at the northwestern portion of the site. Based on observations during this study, red-shouldered hawks may have utilized one or more of these nest sites in early 2005. Although potential raptor nests were observed, no observations indicating current use were noted during the present study. A 30-day preconstruction survey for actively nesting raptors is recommended if nesting habitat will be disturbed during the nesting season (February 1 - August 31). If active nests are identified placement of a 300 foot perimeter of no disturbance around each nest is recommended to be maintained until nesting has ceased (as determined by a qualified biologist).

1.0) INTRODUCTION

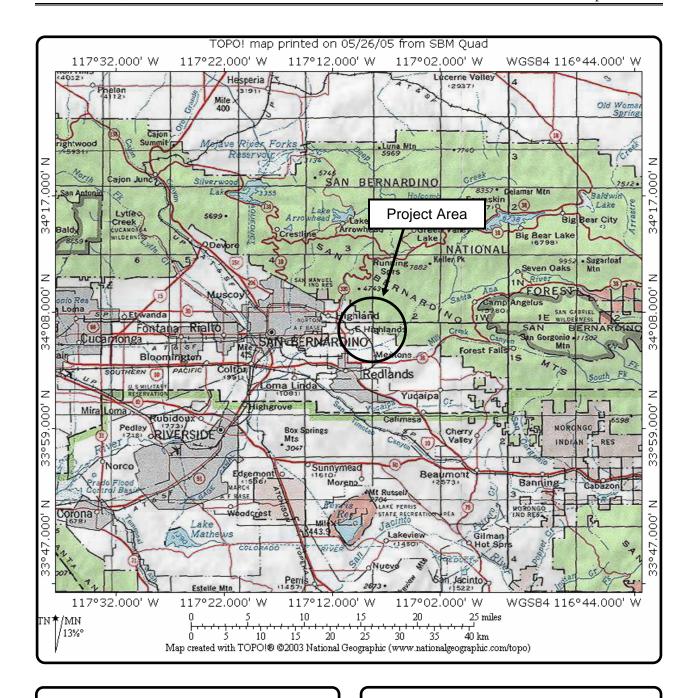
This report was prepared by L&L Environmental, Inc. for North American Residential Communities, LLC., for the ±60 acre project and describes the results of a focused surveys for the burrowing owls and raptor nests. The subject site consists of seven parcels, APNs 1210-211-18, -21, -23, and 1210-281-01 through -04.

Our assessment consisted of (1) a records search and literature review, conducted to determine what species of concern are in the project area and proximity to closest documented special status species and (2) field reconnaissance, intended to identify plants and animals on the property and presence/absence of habitat for species of concern (most significantly burrowing owl and raptor species).

1.1) Project Location

The subject property is generally located north of Interstate Highway 10 (I-10), east of Highway 30, and south of Greenspot Road in the City of Highland (Figure 1). Specifically, the project site lies west of Weaver Street, south of Greenspot Road, north of Abbey Road, and just east of Cherris Street. The project area is located in the northeast quarter of Section 2, Township 1 South, Range 3 West within the USGS Redlands 7.5' series quadrangle map (Figure 2).

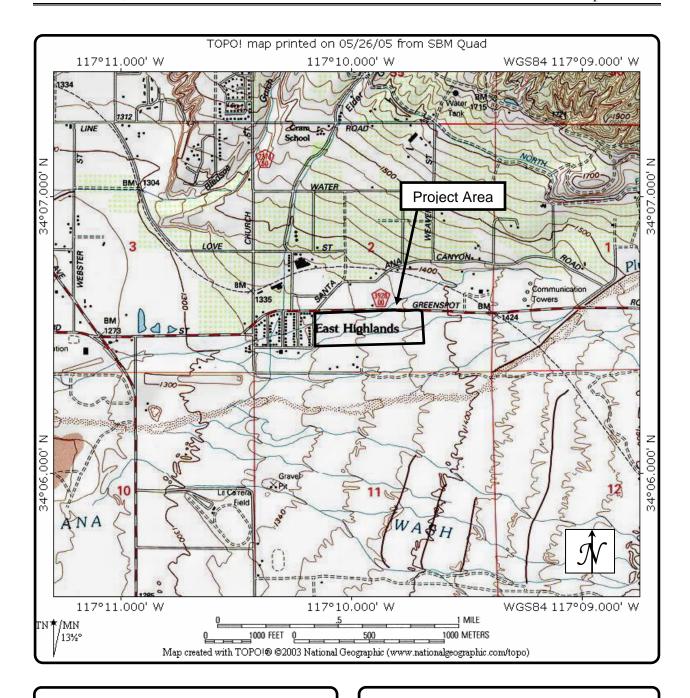
The site is generally bounded as follows: to the west by disturbed open space and a mixture of low and high-density residential developments, Church Street, 5th Street, and Highway 30 beyond; to the east by mostly undisturbed open space with San Bernardino National Forest lands beyond; to the north by Greenspot Road and high-density residential developments, with Santa Ana Canyon Road, Baseline Road, and East Highland Reservoir beyond; and to the south by Abbey Way, a row of power lines, and the Santa Ana Wash basin, with the City of Redlands and I-10 beyond.



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Figure 1 Project Vicinity Map



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Figure 2 Project Location Map



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Figure 3

Aerial Photograph (Photo provided by GlobeXplorer, 2004)

1.2) Site Description

The western approximately one-third of the site has been disturbed and is mostly converted for agricultural uses. It currently contains Eucalyptus groves, a jojoba plantation, and recently disked areas. Several structures are present at the southwestern portion of the site in association with these disturbances.

Land use varies adjacent to the survey area, and includes anthropogenic disturbances such as low and high-density residential areas, commercial strip malls, gravel pit mines, paved and unimproved roads, power lines, and off-road vehicle (ORV) activity. Redlands Municipal Airport is approximately 1.75 miles south of the subject property.

Two mapped blueline stream areas are present on the subject property, trending from the northeast to the southwest away from the San Bernardino Mountain foothills. A persistent water flow was not observed within these drainages. Most wetland indicator tree species were not found in association with the mapped blueline stream areas on the site, with the exception of western sycamore (*Platanus racemosa*). Mapped blueline stream areas onsite can be characterized as being inhabited by common alluvial sage scrub perennial plants, including California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*), California sagebrush (*Artemesia californica*), chaparral yucca (*Yucca whipplei*), yerba santa (*Eriodictyon* sp.), and various lowgrowing native annual plant species.

1.3) Soils and Topography

The soils on the project site were mapped by the Soil Conservation Service (1971) as Soboba gravelly loamy sand (SoC) and Soboba stony loamy sand (SpC). Soils observed on the site are sandy-loamy to gravelly with and (mostly) without cryptobiotic crusts. Clay soils were not observed on the site.

Topographically, the site is primarily flat and contains low-relief rolling hills, shallow canyons, and open disturbed lands with a combined maximum vertical relief of roughly 52 feet between the highest and lowest elevation points on the property. Elevations on the site range from approximately 1341 to 1393 feet above mean sea level (AMSL). Surrounding topographic features in the immediate project vicinity include mostly flat areas with low-relief rolling hills containing canyons and shallow drainages. Other areas further south of the site within the Santa Ana River Wash basin and areas further east and north of the site within San Bernardino National Forest lands contain significantly more topographic relief.

2.0) REGULATORY ENVIRONMENT

2.1) Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) is an international treaty that makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Sections 3503, 3503.5, and 3800 of the CDFG Code prohibit the take, possession, or destruction of birds, their nests or eggs. The MBTA requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (1 February to 31 August, annually). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend could be considered "take" and constitute a violation of the MBTA.

2.2) California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires identification of environmental effects from discretionary projects. Significant effects are to be mitigated by avoidance, minimization, rectification, or compensation whenever possible.

Effects to all state and federally listed species are considered significant under CEQA. In addition to formally listed species, Section 15380(d) of CEQA considers effects to species that are demonstrably endangered or rare as important or significant within CEQA terms. These definitions can include state designated species of special concern, federal candidate and proposed species, NDDB tracked species, and California Native Plant Society 1B and 2 plants.

Appendix G of the CEQA Guidelines is more specific in addressing biological resources and encompasses a broader range of resources to be considered.

3.0) SPECIES INFORMATION

Burrowing owl (*Athene cunicularis*) is a small, brown, crepuscular (active at twilight) ground owl found in open dry grassland, desert, or shrubland areas and in uncultivated agricultural areas, rangelands, and other open areas with low-growing vegetation. The BUOW is the most diurnal of owl species, but is considered mostly crepuscular (usually active around sunrise and sunset). Arthropods (mainly beetles and grasshoppers) make up a large portion of their diet, especially during the breeding season. BUOW are opportunistic feeders and will readily eat small mammals (primarily mice, gophers, and ground squirrels), lizards, amphibians, and small birds.

Although BUOW is capable of excavating its own burrows in soft soils they typically inhabit abandoned burrows of small burrowing mammals, such as pocket gophers, prairie dogs, and badgers. BUOW has also been associated with man-made structures such as cement culverts, debris piles, and other artificial burrows. Burrows are an essential element of burrowing owl habitat. Occupancy of burrowing owl habitat can be verified at a site by observations of at least one owl or by its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance (California Burrowing Owl Consortium 1993).

A site is considered occupied if at least one owl has been identified onsite in the past three years, because (if undisturbed) burrowing owls "exhibit high site fidelity, reusing burrows year after year" (Rich 1984, Feeny 1992). The range of this species is throughout the western United States and Mexico, but is increasingly uncommon in southern California. The BUOW is protected under the Migratory Bird Treaty Act of 1918 and is a special species of concern to California.

Red-shouldered hawks typically nest within deciduous trees, and usually within riparian areas. Trees including western sycamore, willow (*Salix* sp.) and Fremont's cottonwood (*Populus fremontii*) are usually utilized for nesting purposes in southern California. Red-shouldered hawks typically construct their nests within tree crotches.

The American kestrel (*Falco sparverius*) is a cavity nester. They have been observed nesting in artificial nest boxes and various small structures, which may be present in association with occupied residential structures.

Cooper's hawk, like the red-shouldered hawk, is known to nest in mostly deciduous trees.

4.0) METHODS AND PERSONNEL

Pertinent literature was reviewed to identify local occurrences and habitat requirements of special status species occurring in the region. Literature reviewed included compendia provided by resource agencies (CBOC 1993) and California Natural Diversity Database (2005) report for the Redlands quadrangle. In addition, review of sensitive species information from standard reference works, field guides, existing literature, as well as published and unpublished reports contributed to background information.

Latin names of plants follow *The Jepson Manual* (Hickman 1993). Latin names of animals follow *A Field Guide to Western Reptiles and Amphibians* (Stebbins 1985) for reptiles and amphibians, *California Mammals* (Jameson and Peeters 1988) for mammals, American Ornithologists' Union (1983, 1989) and National Audubon Society, *The Sibley Guide To Birds* (2000) for birds, and *American Insects: A Handbook of the Insects of America North of Mexico* (Arnett 2000) for insects.

4.1) Burrow Survey Methods

Guy Bruyea, L&L consulting biologist, conducted the Phase II Burrow Survey on July 11, 12, 13, 16, and 17, 2005. Surveys were conducted in accordance with the Burrowing Owl Survey Protocol as distributed by the California Burrowing Owl Consortium (CBOC 1993). This field survey was conducted during daylight hours. Weather data, current site conditions, survey results, and all other general field observations were noted. Temperature was recorded in degrees Fahrenheit (F) using a digital thermometer, and wind speed was calculated (Beaufort scale) using a digital anemometer. Visibility (in miles) and percent cloud cover were visually estimated and recorded at the start and end of the survey visit.

Digital photographs were taken to record the condition of the site during the present survey and selected photos are included in Appendix B. Plant and animal species were identified in the field or later identified using various texts. All observed plant and animal species and any additional biological information relevant to this study were recorded on general site assessment forms and a list of all species identified is found in Table 3 (Appendix A).

0530-0800

0600-0900

07-16-05

07-17-05

Bruyea

Bruyea

Date	Time	°F	Cloud %	Visibility	Wind B	Biologist(s)
	Start-End	Start/End	Start/End	Start/End	Start/End	
07-11-05	1630-1815	82/74	0/0	10/10	1/1	Bruyea
07-12-05	1500-1700	95/87	0/0	10/10	1/1	Bruyea
07-13-05	1630-1815	84/76	0/0	10/10	1/0	Bruyea

0/0

0/0

10/10

10/10

0/0

0/0

Table 1. Burrowing owl survey times and weather conditions.

61/78

67/81

The present survey was conducted during the peak of nesting season, which is defined by the CBOC as April 15 to July 15. Within the southern California portion of its range BUOW is active and nesting activity will likely increase as the season progresses (into late March, April, and May).

All habitat determined to be minimally suitable was traversed during the Phase II portion of the present BUOW survey and was covered on foot by conducting a series of north to south or east to west transects across the subject property where possible, stopping periodically for observations and notations. Transects were walked along the entire perimeter of the subject property with additional transects through the center portion of the site, allowing for complete visual ground coverage of the survey area. Distance between transects was approximately 25 to 35 meters. As set forth in the conditions of protocol, an additional coverage of an approximately 150 meter buffer area surrounding the site was visually inspected on foot or with binoculars for suitable BUOW habitat and activity where possible. Potential natural and artificial burrows were examined for signs of occupation by BUOW, including tracks, pellets, feathers, animal scat, prey remains, and eggshell fragments. The locations of freshwater sources nearest to the subject property were also noted.

Particular attention was paid to rodent burrows located on the site to identify the presence/absence of burrowing owl sign. Protocol guidelines specify that BUOW surveys should be conducted during weather that is conducive to observing owls outside their burrows. Surveys should not be conducted under any of the following weather conditions: wind speeds in excess of 20 mph, heavy rain, or dense fog. The present survey on the subject property was conducted during weather conditions suitable for BUOW activity.

4.2) Raptor Nest Survey Methods

Following previous identification of potentially suitable nesting habitat for raptors, a focused raptor nest survey was conducted on July 19, 2005. Raptor nests are usually located many feet above the ground surface in moderate to tall trees, which can make identification of active nests difficult (especially early in the nesting season). Ornithologists use a wide variety of techniques to make reasonable determinations of active versus inactive nests. These techniques include (but are not limited to) searches in and around the nest area for signs of recent activity (such as fresh sticks or other foliage), searches around the base of the tree for droppings, feathers, pellets, or other material related to recent raptor activity, monitoring of nests for movement of young, and extensive monitoring of adult raptor behavior (including nest building, nest guarding, etc.)

Relevant areas (primarily the *Eucalyptus* grove at the northwestern portion of the site) were surveyed on foot, stopping periodically for observations and notations. All potentially suitable large trees, telephone poles, and/or other structures were examined for nesting raptor sign. Tree locations containing raptor nests or potential raptor nests were mapped by GPS and are listed in Table 5 (Appendix A). Birds and nest sites were located and identified using standard binoculars. The present survey was conducted during the early morning hours between 0600 and 0900 Pacific (Daylight) Savings Time in clear conditions with little or no wind conditions.

Table 2. Raptor nest survey times and weather conditions.

Date	Time	°F	Cloud %	Visibility	Wind B	Biologist (s)
	Start-End	Start/End	Start/End	Start/End	Start/End	
07-19-05	0600-0900	69/80	0/0	10/10	0/0	Bruyea, J & M Dicus

5.0) RESULTS

5.1) Literature Review

Due to the presence of relatively flat open areas with low-growing vegetation, close proximity to a fresh water source, and recent records of BUOW in other areas of southwestern San Bernardino County and western Riverside County, vegetative habitat suitable for use by BUOW was determined to be present on portions of the subject property. Therefore, a more in-depth Phase II burrow survey to determine the presence/absence of adequate burrow sites was conducted during the present survey. Following the previous identification of potentially suitable nesting habitat for raptors, a focused raptor nest survey was conducted on the project site.

5.2) Vegetation Series

Most of the subject property (estimated at 65 to 70%) can be characterized as relatively undisturbed alluvial fan sage scrub inhabited by a mixture of non-native and mostly native plants (Figure 4). Areas on the western approximately one-third of the site are disturbed in association with past and ongoing human activities such as the cultivation of *Eucalyptus* and jojoba and contain several structures. Other disturbances observed on the western portion of the site include the introduction of invasive non-native plant species, previously cleared and/or recently disked areas, debris piling, and pedestrian and ORV activity. Based on the results of this study, most of the site probably supports a diverse group of native low-growing annuals and other herbs away from these disturbances. Vegetative cover ranges from approximately 0 to 99 percent, depending on location within the site.



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Figure 4

Habitat Map (Photo provided by GlobeXplorer, 2004)

5.2.1) Alluvial Fan Sage Scrub (Holland Element Code 32720)

Alluvial fan sage scrub (AFSS) contains mostly drought-deciduous shrubs with soft leaves and occurs in association with washes and gently sloping alluvial fans. Areas containing AFSS are usually subject to periodic flooding and mature phases of this vegetation community can contain significant cover of larger perennials. Scalebroom (*Lepidospartum squamatum*) is typically an indicator plant species of this vegetation community and is present (uncommonly) within alluvial scrub areas of the site in association with other large plants, including California buckwheat, California sagebrush, yerba santa, and chaparral yucca. Other larger shrubs less commonly observed within these areas include chamise (*Adenostoma fasciculatum*), spiny redberry (*Rhamnus crocea*), holly-leaved cherry (*Prunus illicifolia*), blue elderberry (*Sambucus mexicana*), and sugar bush (*Rhus ovata*). This vegetation community is present throughout the subject property away from disturbances on the western portion of the site.

Other shrubs such as white sage (*Salvia apiana*), brittlebush (*Encelia farinosa*), sweetbush (*Bebbia juncea*), coast cholla (*Opuntia parryi*), interior bush lupine (*Lupinus excubitus*), sand washed butterweed (*Senecio flaccidus*), Thurber's buckwheat (*Eriogonum thurberi*), jimsonweed (*Datura wrightii*), chia (*Salvia columbariae*), California croton (*Croton californicus*), and telegraph weed (*Heterotheca grandiflora*) are present. Small patches of tamarisk (*Tamarix* sp.) were observed on portions of the site within drainage areas.

Native plants commonly found within this community on the subject property include (but are not limited to) deerweed (*Lotus scoparius*), phacelia (*Phacelia* sp.), morning glory (*Calystegia macrostegia*), lanceleaf dudleya (*Dudleya lanceolata*), wild hyacinth (*Dichelostemma capitatum*), and horseweed (*Conyza canadensis*). Less disturbed areas (especially in areas containing a cryptobiotic surface crust or in areas away from dense non-native grass cover) were inhabited with dot-seed plantain (*Plantago erecta*), sun cups (*Cammisonia* sp.), purple clarkia (*Clarkia purpurea*), forget-me-not (*Cryptantha* sp.), popcorn flower (*Plagiobothrys* sp.), purple nightshade (*Solanum xanti*), yellow pincushion (*Chaenactis glabruiscula*), sapphire woolstar (*Eriastrum sapphirinum*), silver puffs (*Uropappus lindleyi*), and other low-growing herbs. Fiddleneck (*Amsinckia menziesii* var. *intermedia*) was observed sporadically throughout disturbed and undisturbed portions of the site.

5.2.2) Peninsular (Cismontane) Juniper Woodland and Scrub (Holland Element Code 72400)

This plant community is characterized by the presence of California juniper (*Juniperus californicus*) within cismontane sage scrub areas. California juniper was found scattered throughout the undisturbed portions of the site, mostly within relatively undisturbed AFSS vegetated areas.

Peninsular juniper woodland and scrub (PJW) is typically found above 2500 feet AMSL. This community is most often associated with the eastern slopes of the peninsular ranges and is found in association with other desert edge plants including pinyon pine (*Pinus monophylla* and/or *P. quadrifolia*), chamise, yucca (*Yucca* sp.), and ceanothus (*Ceanothus* sp.) However, PJW has been documented to occur in other low-lying areas of southwestern San Bernardino County and western Riverside County.

PJW occurs in low-density patches and is found in association with areas containing shrubs such as California buckwheat, California sagebrush, yerba santa, and other plants associated with AFSS areas. Many herbaceous annuals are also present.

5.2.3) Mulefat Scrub (Holland Element Code 63310)

Mulefat scrub is dependent on periodic flooding and is characterized by the presence of mulefat and other mostly winter deciduous trees, including arroyo willow (*Salix lasiolepis*) and Fremont's cottonwood.

The eastern portion of the site contains a north to south trending drainage channel that is lined on both sides by mulefat and a single mature Fremont's cottonwood. The understory is inhabited by plants typically associated with this vegetation community, including (but not limited to) cocklebur (*Xanthium strumarium*), dwarf nettle (*Urtica urens*), seep monkeyflower (*Mimulus guttatus*), and non-native species such as sweet alyssum (*Lobularia maratime*), water speedwell (*Veronica anagallis-aquatica*), common purslane (*Portulaca oleracea*), and prickly sow-thistle (*Sonchus asper*). Other mostly non-native plant species, such as burclover (*Medicago polymorpha*), sourclover (*Melilotus indica*), everlasting cudweed (*Gnaphalium luteo-album*), common groundsel (*Senecio vulgaris*), annual sunflower (*Helianthus annuus*), Italian thistle (*Carduus pychnocephalus*), curly dock (*Rumex crispus*), nutsedge (*Cyperus eragostris*), knotweed (*Polygonum aviculare*), wild radish (*Raphinus sativus*), scarlet pimpernel (*Anagallis arvensis*), rabbit's foot grass (*Polypogon monspiliensis*), and spangletop (*Leptochloa univerva*), were observed.

5.2.4) Non-Native Eucalyptus Woodland (Holland Element Code 11300 or 11000)

Eucalyptus trees (native to Australia) are commonly found in southern California and have been widely utilized as shade trees in the area since the 1850s. Two separate Eucalyptus groves are present at the northwestern corner of the subject property. A diverse shrub understory is not present at this location. Mostly weedy low-growing annuals and grasses were observed in association with these groves.

5.2.5) Disturbed / Ruderal Habitat (Holland Element Code 11300)

Disturbed habitat includes areas that contain mostly non-native plant species including ornamentals and ruderal exotics. Disturbed areas on the western portion of the site that are not currently inhabited with Eucalyptus, jojoba, or other ornamental plants are now largely ruderal. Mostly non-native weedy species have invaded these areas, including short-pod mustard (*Hirschfeldia incana*), red-stemmed filaree (*Erodium cicutarium*), long-beaked storksbill (*Erodium botrys*), tumble pigweed (*Amaranthus albus*), prickly lettuce (*Lactuca serriola*), and Russian thistle (*Salsola tragus*). Very dense non-native grasses including red brome (*Bromus madritensis* ssp. *rubens*), ripgut (*Bromus diandrus*), cheatgrass (*Bromus tectorum*), fescue (*Vulpia* sp.), and oats (*Avena* sp.), were observed in disturbed and undisturbed areas, choking out low-growing plant species.

Other plant species less commonly observed within disturbed areas of the subject property include calabazilla (*Cucurbita foetidissima*), tocalote (*Centaurea melitensis*), annual bur weed (*Ambrosia acanthicarpa*), puncture vine (*Tribulus terrestris*), vinegar weed (*Trichostemma lanceolatum*), and cheeseweed (*Malva parviflora*).

5.2.6) Extensive Agriculture (Holland Element Code 18300)

Several rows of cultivated jojoba (*Simmondsia chinensis*) plants are present at the southwestern portion of the site south of the Eucalyptus groves.

5.3) Plant Species

This survey was conducted during the late spring months after sufficient early winter precipitation amounts (i.e., it was a relatively 'productive' year for spring annual germination and subsequent identification). Although this survey was performed just after the April to May blooming period for some narrow endemic special status plant species known from the region, many species can still be identified from senescing or senesced plants. No special status plant species were observed during this study. However, additional focused surveys for special status plants (especially annuals) known from the region are recommended based on the results of this assessment and the site's proximity to the Santa Ana River Wash where several rare plants are known to occur.

5.4) Phase II BUOW Burrow Survey

During the present Phase II burrow survey, California ground squirrels (*Spermophilus beechey*i) and California ground squirrel burrows were observed (primarily along site boundaries or within sparsely vegetated and/or disturbed areas around the western portion of the site). These areas of potentially suitable BUOW habitat were the primary focus of the present survey effort. Additional searches were conducted along berms adjacent to the drainage channel at the northeastern corner of the site and in other open areas adjacent to the southern and northern site boundaries.

No Burrowing owl scat and/or pellets were found within the survey area, including below potential perching locations. No BUOW, owls, occupied burrows, or burrowing owl sign were observed on the subject property during the Phase II burrow surveys.

5.5) Buffer Area

As per protocol conditions, an approximately 150 meter buffer area around the entire site was assessed (where possible) for potential BUOW burrows. Areas surrounding the site to the north contain high-density residential areas, which are largely considered unsuitable as potential BUOW habitat. Undisturbed AFSS areas east of the site contain mostly dense (greater than 30%) cover of larger perennial plants, which are also considered largely unsuitable as potential BUOW habitat. These areas were not included in the buffer search. Sparsely vegetated areas containing large open patches (disturbed by ORV activity, past farming activities, and/or previous disking or clearing) west and south of the site were included in the present 150-meter buffer survey area. Additional California ground squirrel activity was observed in some of these

areas, but no BUOW or BUOW sign were observed either on or immediately adjacent to the subject property.

5.6) Raptor Nesting

Potential nesting locations for raptor species is present within *Eucalyptus* groves on the northwestern corner of the site and within some larger western sycamores scattered on the northern portion of the site. Cooper's hawk (*Accipiter cooperii*) and red-tail hawk (*Buteo jamaicensis*) were observed on the northern portion of the site during the present study.

A total of six (6) potential raptor nest sites were observed during the present study. All nests appeared unoccupied, which is expected based on the timing of this study (summer). Sign indicating their current use was not observed, including raptors on or immediately adjacent to the nests, fresh foliage within and/or around the nest area, or droppings and/or feathers on the ground beneath the nests. All nests were observed within the *Eucalyptus* grove (consisting of two small groves separated by disked areas) at the northwestern portion of the site. Five nest sites were observed in the more densely vegetated westernmost grove and one nest site was observed in the less densely vegetated easternmost grove. No other potential raptor nest sites were observed anywhere else on the subject property. All nests were observed within the top (highest) one-third portion of the trees, and some were observed within the crotch of a tree separated by two or more main branches. Although all nest sites appear suitable as raptor nests, some nests may belong to American crow (*Corvus brachyrhynchos*) and/or common raven (*Corvus corax clarionensis*), which construct similarly sized large nests. American crow and common raven were observed on the site during the present study.

Two red-shouldered hawks (not identified as male or female) were observed at the northwestern portion of the site, perched within both *Eucalyptus* groves, and within a western sycamore during the present study. A single red-tail hawk was observed flying over the southwest corner of the site.

Red-shouldered hawks typically nest within deciduous trees and usually within riparian areas. Trees including western sycamore, willow (*Salix* sp.), and Fremont's cottonwood (*Populus fremontii*) are usually utilized for nesting purposes in southern California. Red-shouldered hawks typically construct their nests within tree crotches, which is consistent with most nest sites observed on the site. Since two red-shouldered hawks were observed at the northwestern portion of the site (on two different dates) during the present study, it can be reasonably assumed that one or both birds may have recently used nests in the immediate area. The

nearest blueline stream area (Santa Ana Wash) that is inhabited by large trees lies less than 0.5 miles south of this *Eucalyptus* grove. During the present study red-shouldered hawks were consistently observed perched or flying near the Eucalyptus trees along Greenspot Road on the subject property.

The American kestrel (*Falco sparverius*) is a cavity nester and potential exists for this species to nest within a tree cavity observed on a western sycamore at the northern portion of the site. Activities related to nesting American kestrel were not observed during the present study. They have been observed nesting in artificial nest boxes and various small structures, which may be present in association with occupied residential structures that are present on and adjacent to the site and which may occasionally be expected to be utilized. This common species is expected to utilize the area though American kestrel was not observed during the previous or present surveys of the site.

Cooper's hawk, like the red-shouldered hawk, is known to nest in mostly deciduous trees. A single Cooper's hawk was observed during the previous study of the site.

Behavior directly associated with nest building or nest occupation was not observed for any of the aforementioned raptor species during the present study.

5.7) Other Wildlife

A total of twenty-six (26) wildlife species were observed and identified during the present survey of the site, including 23 bird species, one (1) mammal species, and two (2) reptile species. No amphibians were observed during this study. No federal or state listed endangered or threatened species were observed. All vertebrate wildlife species observed and identified during the present study, either by direct observation or by vocalization (for birds), are included in Table 3 (Appendix A).

5.7.1) Other Sensitive Wildlife Resources

Other sensitive wildlife species documented by the CNDDB as occurring within the general vicinity of the subject property include (but are not necessarily limited to) the southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), northern red-diamond rattlesnake (*Crotalus ruber ruber*), orange-throated whiptail (*Cnemidophorus hyperythrus*), and coast horned lizard (*Phrynostoma coronatum*). Due to the relatively undisturbed nature of the site, several sensitive reptiles, including the ones referenced above, have a moderate probability to occur on the subject property.

Other sensitive resources with a moderate probability to occur on the site include the loggerhead shrike (*Lanius Iudovicianus*) and San Diego black-tailed jackrabbit (*Lepus californicus*). These animals tolerate areas that are disturbed and are known from the general region. These species were not observed during the present study. The CDFG considers the loggerhead shrike and San Diego black-tailed jackrabbit as special species of concern to California.

California horned lark (*Eremophila alpestris*), a species of special concern to California, may occasionally utilize the western portion of the subject property. This species is frequently observed within agricultural areas and other open habitats in southwestern San Bernardino County.

No sensitive wildlife species were observed or detected during the present evaluation. No focused habitat evaluation for any of the above-referenced endangered, threatened, or sensitive wildlife species was conducted during the present survey.

5.8) Jurisdictional Areas (Riparian/Riverine and Vernal Pool Habitat)

Two USGS mapped blueline drainages cross the site. The drainages enter the site from the northeast and flow generally toward the southwest. No vernal pools were identified onsite.

6.0) CONCLUSIONS

Potential BUOW nesting sites appear very limited on the project site and in adjacent areas. Much of the subject property contains a diverse group of native low-growing annuals and other herbs as well as areas of previous disturbance associated with current and past anthropogenic activities. The present study indicates that much of the property can be characterized as relatively undisturbed alluvial fan sage scrub inhabited by a mixture of non-native and mostly native plants.

The present study indicates that portions of the property do currently maintain quality potential habitat for sensitive wildlife and/or plant species. Potential nesting locations for raptor species are present within the *Eucalyptus* groves and within some of the larger western sycamores on the project site. Focused surveys for special status plants (especially annuals) known from the region are recommended based on the results of this assessment and the site's proximity to the Santa Ana River Wash.

After careful examination of the site this nesting season survey found no BUOW, recently occupied burrows, or burrowing owl sign on the subject property or within the 150 meter buffer area. L&L has determined this species to be currently absent from the project site. Although no BUOW or BUOW sign was observed during the present study, habitat to support this species may be present on the western approximately one-third of the subject property where California ground squirrel activity is present. An additional 30-day preconstruction survey is recommended for this species.

Based on the results of the raptor nest survey, several potential nest sites (currently presumed inactive) are present within the *Eucalyptus* groves at the northwestern portion of the site. Based on observations during this study, red-shouldered hawks may have utilized one or more of these nest sites in early 2005. Although potential raptor nests were observed, no observations indicating current use were noted during the present study. A 30-day preconstruction survey for actively nesting raptors is recommended if nesting habitat will be disturbed during the nesting season. Active nests are protected by state and federal law. If active nests are identified placement of a 300 foot perimeter of no disturbance around each nest is recommended to be maintained until nesting has ceased (as determined by a qualified biologist).

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APPENDIX A

Table 3. List of plant (N=110) and wildlife (N=26*) species detected on the Heatherglen site, NAR-05-646.BO1/RN1

This list represents plant species detected onsite during a reconnaissance-level botanical evaluation conducted in the late spring (July). Based on the scope of the present survey (burrowing owl and nesting raptor surveys only), not all plants that may have been present on site were necessarily observable (or identified) during this study. For an exhaustive botanical assessment, surveys are required throughout the year to achieve thorough plant inventories. Plants were identified using keys, descriptions, and illustrations in Abrams (1923-1960), Hickman (1993), Munz (1974), and Parker (1999). Plant taxonomy and nomenclature generally follows Hickman. A single asterisk (*) indicates non-native (alien) plant taxa.

Scientific Name

Common Name

Plants

Amaranthaceae

Amaranthus albus

Anacardiaceae

Rhus ovata Schinus molle

Asteraceae

Ambrosia acanthicarpa Artemesia californica Baccharis salicifolia Bebbia juncea

Carduus pychnocephalus
Centaurea melitensis
Chaenactis glabriuscula
Conyza boniarensis
Conyza canadensis
Encelia farinosa
Ericameria sp.
Erigeron foliosus
Filago californica

Gnaphalium luteo-album

Gutierrezia sp. Helianthus annuus Hemizonia sp.

Heterotheca grandiflora

Lactuca serriola Lasthenia californica

Lepidospartum squamatum

Senecio flaccidus Senecio vulgaris Sonchus oleraceus Sonchus asper Pigweed Family

Tumble Pigweed

Sumac Family

Sugar Bush Peruvian Pepper*

Sunflower Family

Annual Bur-Sage California Sagebrush

Mulefat Sweetbush Italian Thistle* Tocalote*

Yellow Pincushion Flax-leaved Fleabane

Horseweed
Brittlebush
Goldenbush
Fleabane Aster
California Filago
Everlasting Cudweed

Matchweed Annual Sunflower Unidentified Tarweed Telegraph Weed Prickly-lettuce* Goldfields

Sand Washed Butterweed Common Groundsel*

Sow-thistle*

Scalebroom

Prickly Sow-thistle*

Appendix A (Continued) Scientific Name

Asteraceae (cont.)

Stephanomeria virgata Uropappus lindleyi Xanthium strumarium

Boraginaceae

Amsinckia menziesii var. intermedia Cryptantha sp. Plagiobothrys sp.

Brassicaceae

Hirschfeldia incana Lobularia maritime Raphinus sativus Sisymbrium irio

Cactaceae

Opuntia parryi Opuntia sp.

Caprifoliaceae

Sambucus mexicana

Chenopodiaceae

Salsola tragus Chenopodium album

Convolvulaceae

Calystegia macrostegia

Crassulaceae

Dudleya lanceolata

Cucurbitaceae

Cucurbita foetidissima

Cupressaceae

Juniperus californica

Cyperaceae

Cyperus eragostris

Euphorbiaceae

Chamaesyce albomarginata Croton californicus Euphorbia sp.

Common Name

Sunflower Family

Twiggy Wreath Plant Silver Puffs Cocklebur

Borage Family

Fiddleneck Unidentified Forget-Me-Not Popcorn Flower

Mustard Family

Short-pod Mustard* Sweet Alyssum* Wild Radish* London Rocket*

Cactus Family

Valley Cholla Beavertail Cactus

Honeysuckle Family

Blue Elderberry

Goosefoot Family

Russian Thistle Lamb's Quarters*

Mourning-Glory Family

Morning Glory

Stonecrop Family

Lanceleaf Dudleya

Gourd Family

Calabazilla

Cypress Family

California Juniper

Sedge Family

Tall Umbrella Nutsedge

Spurge Family

Rattlesnake Weed California Croton Ground Spurge*

Appendix A (Continued) **Scientific Name**

Fabaceae

Lotus scoparius

Lotus sp.

Lupinus bicolor Lupinus excubitus Medicago polymorpha

Melilotus alba Melilotus indica

Geraniaceae

Erodium cicutarium Erodium botrys

Hydrophyllaceae

Eriodictyon sp. Phacelia sp.

Lamiaceae

Salvia apiana Salvia columbariae

Trichostemma lanceolatum

Liliaceae

Dichelostemma capitatum Yucca whipplei

Lythraceae

Lagerstroemia sp.

Malvaceae

Malva parviflora

Myrtaceae

Eucalyptus sp.

Onagraceae

Cammisonia sp. Clarkia purpurea

Epilobium ciliatum var. ciliatum

Plantaginaceae

Plantago erecta

Plantanaceae

Platanus racemosa

Common Name

Pea Family

Deerweed

Unidentified Lotus

Dove Lupine

Interior Bush Lupine

Burclover*

White Sweetclover*

Sourclover*

Geranium Family

Red-stemmed Filaree* Long-beaked Storksbill*

Waterleaf Family

Yerba Santa Distant Phacelia

Mint Family

White Sage Chia

Vinegar Weed

Lily Family

Wild Hyacinth Chaparral Yucca

Loosestrife Family

Crepe Myrtle *

Mallow Family

Cheeseweed*

Myrtle Family

Gum Tree*

Evening Primrose Family

Evening Primrose/Sun Cups

Purple Clarkia Green Willowherb

Plantain Family

Dot-seed Plantain

Sycamore Family

Western Sycamore

Appendix A (Continued)

Scientific Name

Poaceae

Avena barbata.

Avena sp.

Bromus diandrus

Bromus madritensis ssp. rubens

Bromus tectorum Cynodon dactylon Digitaria sanguinalis Lamarckia aurea Leptochloa univerva

Poa annua

Polypogon monspiliensis

Schismus barbatus

Vulpia sp.

Polemoniaceae

Eriastrum sapphirinum

Polygonaceae

Eriogonum fasciculatum var. foliolosum

Eriogonum sp.
Eriogonum thurberi
Polygonum aviculare
Rumex crispus

Portulacaceae

Portulaca oleracea

Primulaaceae

Anagallis arvensis

Rhamnaceae

Rhamnus crocea

Rosaceae

Adenostoma fasciculatum Prunus illicifolia

Salicaceae

Populus fremontii

Scrophulariaceae

Mimulus guttatus

Veronica anagallis-aquatica

Simmondsiaceae

Simmondsia chinensis

Common Name

Grass Family

Slender Wild Oat*

Oat*

Ripgut Brome*
Foxtail Chess*
Cheatgrass*
Bermuda Grass*
Large Crabgrass*
Goldentop*
Spangletop*

Annual Bluegrass* Rabbit's Foot Grass Mediterranean Grass

Fescue*

Phlox Family

Sapphire Woolstar

Buckwheat Family

California Buckwheat Unidentified Buckwheat Thurber's Buckwheat

Knotweed*
Curly Dock*

Purslane Family

Common Purslane*

Primrose Family

Scarlet Pimpernel*

Buckthorn Family

Spiny Redberry

Rose Family

Chamise

Holly-leaved Cherry

Willow Family

Western Cottonwood

Figwort Family

Seep Monkeyflower Water Speedwell*

Jojoba Family

Jojoba*

Appendix A (Continued)

Scientific Name

Solanaceae

Datura wrightii Nicotiana glauca Solanum xanti

Tamaricaceae

Tamarix sp.

Urticaceae

Urtica urens

Viscaceae

Phorodendron sp.

Zygophyllaceae

Tribulus terrestris

<u>Birds</u>

Scientific Name

Acciptiridae

Accipiter cooperii Buteo jamaicensis

Aegithalidae

Psaltriparus minimus

Bombycillidae

Phainopepla nitens

Charadriidae

Charadrius vociferus

Columbidae

Zenaida macroura

Corvidae

Corvus brachyrhynchos

Emberizidae

Pipilo crissalis Pipilo maculatus **Common Name**

Nightshade Family

Western Jimsonweed Tobacco Tree* Purple Nightshade

Tamarisk Family

Tamarisk*

Nettle Family

Dwarf Nettle*

Mistletoe Family

Unidentified Mistletoe

(Juniper)

Caltrop Family

Puncture Vine*

Common Name

Hawk Family

Cooper's Hawk Red-tail Hawk

Long-tailed Tit Family

Bushtit

Waxwing Family

Phainopepla

Plover Family

Killdeer

Pigeon Family

Mourning Dove

Jay and Crow Family

American Crow

Emberizine Sparrow Family

California Towhee Spotted Towhee

Appendix A (Continued)

Scientific Name

Icteridae

Euphagus cyanocephalus Icterus bullockii

Fringillidae

Carduelis psaltria Carpodacus mexicanus

Mimidae

Mimus polyglottos polyglottos

Odontophoridae

Callipepla californica californica

Sturnidae

Sturnus vulgaris

Trochilideae

Calypte anna Calypte costae

Troglodytidae

Thryomanes bewickii Troglodytes aedon

Tyrannidae

Myiarchus cinerascens Sayornis nigricans Tyrannus verticalis

Mammals

Sciuridae Sparmanhilus haashay

Spermophilus beecheyi

Reptiles & Amphibians

Iguanidae

Uta stansburiana

Teiidae

Cnemidophorus tigris

Common Name

Icterid Family

Brewer's Blackbird Bullock's Oriole

Finch Family

Lesser Goldfinch House Finch

Mockingbird Family

Northern Mockingbird

Quail Family

California Quail

Starling Family

European Starling

Hummingbird Family

Anna's Hummingbird Costa's Hummingbird

Wren Family

Bewick's Wren House Wren

Tyrant Flycatchers

Ash-throated Flycatcher Black Phoebe Western Kingbird

Squirrel Family

California Ground Squirrel

Iguanid Family

Side-blotched Lizard

Teiid Lizard Family

Western Whiptail

Table 4. Special status species - Plants

Special Status Species	Habitat and Distribution	Flower season		Occurrence Probability
PLANTS (n=7)				
Calochortus plummerae Plummer's mariposa lily	Chaparral and pine forest, below about 5500 ft. el.; widespread but uncommon throughout S Ca. mtns., foothills, and valleys	May - July	Fed: none CA: S3.2 CNPS: List 1B R-E-D:2-2-3	L
Chorizanthe parryi var. parryi Parry's spineflower	LA, San Bernardino, and Riverside Cos.; "sandy places, gen in coastal or desert scrub," about 1000-4000 ft. elev.	April - June	Fed: none CA: S2.1 CNPS: List 3 R-E-D:?-2-3	L-M
Dodecahema leptocerus Slender-horned spineflower (synonyms: Chorizanthe I., Centrostegia I.)	Open, sandy alluvial benches in valleys and canyons; San Fernando Vally, Santa Ana River Valley, W Riverside Co.	April - June	Fed: END CA: S1.1, END CNPS: List 1B R-E-D:3-3-3	M
Eriastrum densifoloium ssp. sanctorum Santa Ana River woollystar	Shrubland, alluvial fans and plains; endemic to Santa Ana River water- shed, Orange Co. to San Bern. Co. (Zembel & Kramer 1984)	May - Sept.	Fed: END CA: S1.1, END CNPS: List 1B R-E-D:3-3-3	M-H
Malacothamnus parishii Parish's bush mallow	Chapparral, coastal sage scrub in a wash; in the vicinity of San Bernardino	May- Sept.	Fed: None CA: SH, None CNPS: List 1A	А
Ribes divaricatum var. parishii Parish's Gooseberry	Riparian woodland, Salix swales in riparian habitat; San Gabriel River, San Bernardino Valley, Pasadena	February - April	Fed: None CA: S1.1, None CNPS: List 1B R-E-D: 3-3-3	A
Riversidian Alluvial Fan Sage Scrub	Alluvial fans and flood plains along the southern bases of transverse ranges and portions of the peninsular ranges in southern California.; Los Angeles, San Bernardino and Orange Counties	March- Sept.	Fed: None CA: S1.1, None CNPS: None	

Plant references: CDFG (1998, 1999, 2004), Hickman (ed., 1993) Munz (1974), Skinner & Pavlik (1994), USFWS (1993, 1996)

Special Status Species - Wildlife

Special Status Species	HABITAT AND DISTRIBUTION	Status Designation	Occurrence Probability		
REPTILES AND AMPHIBIANS (1)					
Phrynosoma coronatum blainvillii San Diego horned lizard	Coastal sage scrub, low elevation chaparral, annual grassland, oak and riparian woodlands, and coniferous forests. Southwestern California to northwestern Baja California, Mexico	Fed: None CA: None NDDB: S2S3	M-H		
FISH (1):					
Rhinichthys osculus "subspecies 3" Santa Ana speckled dace	Endemic to Santa Ana and San Gabriel Riv. watersheds, historic in Big Tujunga Cyn. Sta Ana Riv populations in lower S.Bern Mtn foothills & washes	Fed: SOC CA: CSC S1	А		
BIRDS (1):					
Polioptila californica California gnatcatcher	Sage scrub comms. also chaparral, grasslands & riparian comms adjacent to or mixed w/ sage scrub. So Ventura Co to LA, Orange, Riv., San Bern., San D. Cos into Baja Ca, Mexico.	Fed: THR CA: None NDDB: S2	L		
MAMMALS (2):					
Chaetodipus fallax fallax (Perognathus f. fallax) Northwestern San Diego pocket mouse	Open shrublands and sandy areas; SW Calif. and NW Baja Calif. (inland to San Bernardino Val)	Fed: None CA: S2S3	L		
Dipodomys merriami parvus San Bernardino Kangaroo Rat	Sparse, gently sloping grassland, sometimes at margins of cultivated or disturbed lands; San Bernardino County W Riverside Co. and adjacent San Diego Co.	Fed: END CA: S1	L (no sign)		

General references: Natural Diversity Data Base Special Animals 2004. Status designations and occurrence probabilities are defined in the Key.

Key for Special Status Species Designation Codes (Table 2)

Federal designations: (federal Endangered Species Act, US Fish and Wildlife Service):

- END: Federally listed, endangered.
- THR: Federally listed, threatened.
 - C1: Category I candidate. Sufficient data are available to support federal listing, but not listed at this time (equivalent to "candidate" (USDI Fish and Wildlife Service 1996).
- Former C2: Formerly a Category 2 candidate species. Threat and/or distribution data are not sufficient to support federal listing at this time. No longer recognized by FWS.
 - C3a: Extinct.
 - C3b: Taxonomically invalid.
 - C3c: Too widespread and/or not threatened. No longer considered as a federal candidate for listing.
 - FSC: Federal Species of Concern

State designations: (California Endangered Species Act, California Dept. of Fish and Game)

- END: State listed, endangered.
- THR: State listed, threatened.
- **RARE:** State listed as rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
 - **CSC:** California Species of Concern (DFG)

CDF&G Natural Diversity Data Base Designations: Applied to special status plants and sensitive plant communities; where correct category is uncertain, CDF&G uses two categories or question marks.

- S1: Fewer than 6 occurrences or fewer than 1000 individuals or less than 2000 acres.
- S1.1: Very threatened
- S1.2: Threatened
- S1.3: No current threats known
 - S2: 6-20 occurrences or 1000-3000 individuals or 2000-10,000 acres (decimal suffixes same as above).
 - S3: 21-100 occurrences or 3000-10,000 individuals or 10,000-50,000 acres (decimal suffixes same as above)
 - S4: Apparently secure in California; this rank is clearly lower than S3 but factors exist to cause some concern, i.e., there is some threat or somewhat narrow habitat. No threat rank.
 - S5: Demonstrably secure or ineradicable in California. No threat rank.

California Native Plant Society (CNPS) designations: (Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions; see text.)

- List 1A: Plants presumed extinct in California.
- List IB: Plants rare and endangered in California and throughout their range.
- List 2: Plants rare, threatened or endangered in California but more common elsewhere in their range.
- List 3: Plants about which we need more information; a review list.
- List 4: Plants of limited distribution; a watch list.

CNPS R-E-D Code:

- Rarity I: Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
 - 2: Occurrence confined to several populations or one extended population.
 - 3: Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.
- Endangerment 1: Not endangered.
 - 2: Endangered in a portion of its range.
 - 3: Endangered throughout its range.
 - Distribution 1: More or less widespread outside California.
 - 2: Rare outside California.
 - 3: Endemic to California (i.e., does not occur outside California).

Definitions of occurrence probability:

- Occurs: Observed on the site during surveys described here, or recorded on-site by other qualified biologists.
 - High: Observed in similar habitat in region by qualified biologists, or often occurs in habitat similar to that on the site, and within the known range of the species.
- Moderate: Reported sightings in surrounding region, or site is within the known range of the species and often occurs in habitat similar to that on the site.
 - Low: Site is within the known range of the species but habitat on the site is rarely used by the species.
 - Absent: A focused study failed to detect the species, or, no suitable habitat is present, or the site is well outside known geographic or elevational ranges.
- *Unknown:* No focused surveys have been performed in the region, and the species' distribution and habitat are poorly known.

Table 5. Locations of potential raptor nest sites (July 19, 2005).

Number	GPS Location (WGS 1984)	Elev.	Observation	Photo
1	N 34°06.517' W117°10.063'	~1388	Potential Raptor Nest in Eucalyptus	No
2	N 34°06.497' W117°10.066'	~1388	Potential Raptor Nest in Eucalyptus	8925
3	N 34°06.501' W117°10.092'	~1388	Potential Raptor Nest in Eucalyptus	No
4	N 34°06.555' W117°10.064'	~1388	Potential Raptor Nest in Eucalyptus	8928
5	N 34°06.499' W117°10.085'	~1388	Potential Raptor Nest in Eucalyptus	No
6	N 34°06.534' W117°10.006'	~1388	Potential Raptor Nest in Eucalyptus	No
7	N 34°06.568' W117°09.938'	~1388	Potential Raptor Nest in Sycamore*	No

All nests (excluding nest site number 5) were located in the crotch of a tree, which may indicate use by red-shouldered hawk.

^{*} Nest site was not actually detected. Location marked includes a tree cavity observed within a western sycamore that may be suitable for raptor species that nest in cavities, such as American Kestrel.

APPENDIX B

Site Photos



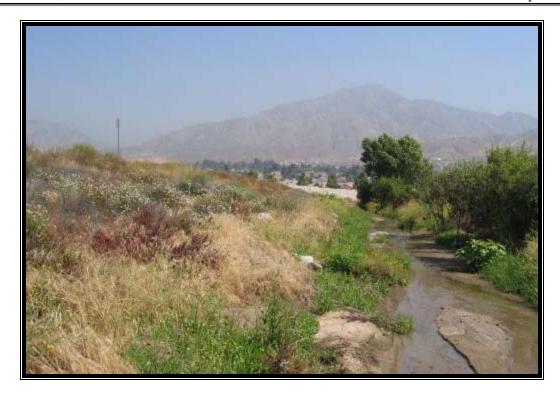


Photos 1 and 2: Views of the alluvial fan sage scrub on the southside (top) and the westside of the project site.





Photos 3 and 4: View of the Eucaluptus grove and disked area in the northwest corner of the property. Potential habitat for raptors.





Photos 5 and 6: Views of the drainage located on the eastern portion of the site facing North (top) and facing South (bottom).

Certification

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

DATE: September 19, 2005 SIGNED:

Leslie Irish, Principal, L&L Environmental, Inc