SECTION 4. SPECIAL-STATUS BIOLOGICAL RESOURCES

This section analyzes the biological significance of the project area in consideration of Federal, State, and local laws and policies. Section 4 provides the definitions of special-status species, and presents the special-status biological resources observed and expected onsite.

A search of the CNDDB RareFind3 (CDFG 2005) was conducted to report all tracked special-status species and habitats with potential to occur at the project site. Nine (9) California Quadrangles (USGS 7.5-minute Series Topographic Map) were queried for the CNDDB RareFind3 records search. Oat Mountain Quadrangle, in which the project site occurs, was searched, as well as all surrounding eight quadrangles, including Val Verde, Newhall, Mint Canyon, San Fernando, Van Nuys, Canoga Park, Calabasas, and Santa Susana.

DEFINITIONS OF SPECIAL-STATUS SPECIES

Special-status Habitats are vegetation types, associations, or sub-associations that support concentrations of special-status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife. Although special-status habitats are not afforded legal protection unless they support protected species, potential impacts on them may elicit concerns and mitigation suggestions by resources agencies.

Special-status species are plants and animals that are at least one of the following:

- *Listed as endangered* or *threatened* under Federal or California Endangered Species Acts,
- *Listed as rare* under the California Native Plant Protection Act, or
- *Considered rare* (but not formally listed) by resource agencies, professional organizations (e.g. Audubon Society, CNPS, The Wildlife Society), and the scientific community.

For the purposes of this project, special-status species are defined in Table 8, Definitions of Special-Status Species.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g. U.S. Fish and Wildlife Service), pursuant to the Federal Endangered Species Act or as endangered, threatened, or rare (for plants only) by the State of California (i.e., California Fish and Game Commission), pursuant to the California Endangered Species Act or the California Native Plant Protection Act.

The CNPS' *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001, 2005[9]) categorizes rare California plants into one of five lists (1A, 1B, 2, 3, and 4) representing the five levels of species status, one of which is assigned to a sensitive species to indicate its status of rarity or endangerment and distribution. Table 9, California Native Plant Society List, provides a definition for each List code number. A CNPS List is a more general designation than the three separate sets of information provided in a CNPS R-E-D Code (defined in Table 10, California Native Plant Society R-E-D Code). However, the CNPS List is a significant designation in terms of a species' overall status throughout all of California, and it works well in conjunction to the specifications of the R-E-D Code.

[9] Changes to the *Inventory* as published on the CNPS website (http://www.cnps.org/programs/Rare_Plant/inventory/changes/changes_accepted.htm).

Table 8. Definitions of Special-Status Species

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

Special-Status Plant Species	Special-Status Animal Species
• Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in *Federal Register* for proposed species). • Plants that are Category 1 or 2 candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (55 CFR 6184, February 21, 1990). • Plants that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380). • Plants considered by CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in CNPS 2001). • Plants listed by CNPS as plants needing more information and plants of limited distribution (Lists 3 and 4 in CNPS 2001). • Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5). • Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.). • Plants considered sensitive by other federal agencies (i.e. U.S. Forest Service, Bureau of Land Management) or state and local agencies or jurisdictions. • Plants considered sensitive or unique by the scientific community; occurs at natural range limits (*State CEQA Guidelines*, Appendix G).	• Animals listed/proposed for listing as threatened/endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in *Federal Register* for proposed species). • Animals that are Category 1 or 2 candidates for possible future listing as threatened or endangered under Federal Endangered Species Act (54 CFR 554). • Animals that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380). • Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5). • Animal species of special concern to the CDFG (Remsen [1978] for birds; Williams [1986] for mammals). • Animal species that are fully protected in California (California Fish & Game Code, Sections 3511 [birds], 4700 [mammals], 5050 [reptiles, amphibians]).

Table 9. California Native Plant Society List (CNPS List)

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

The CNPS R-E-D Code is a three-numbered numeric ranking, which is assigned to a special-status species, consisting of one number (1, 2, or 3) for each of the three categories (Rarity-Endangerment-Distribution). Each number accurately describes the species' population levels and distribution patterns within each category. The three number-codes are described for each category in Table 10, California Native Plant Society R-E-D Code, and is specific for each category.

Table 10. California Native Plant Society R-E-D Code

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

The CNDDB Element Ranking system provides a numeric global and state-ranking system for all special-status species tracked by the CNDDB. The global rank (G-rank) is a reflection of the overall condition of an element (species or natural community) throughout its global range. The state rank (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank. This Element Ranking system is defined below in Table 11, California Natural Diversity Database Element Ranking System.

Table 11. California Natural Diversity Database Element Ranking System

Global Ranking (G)	
G1	Less than 6 viable element occurrences (populations for species), OR less than 1,000 individuals, OR < 809.4 hectares (ha) (2,000 acres [ac]).
G2	6 to 20 element occurrences OR 809.4 to 4,047 ha (2,000 to 10,000 ac).
G3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac).
G4	Apparently secure; this rank is clearly lower than G3, but factors exist to cause some concern (i.e. there is some threat, or somewhat narrow habitat).
G5	Population, or stand, demonstrably secure to ineradicable due to being commonly found in the world.
GH	All sites are **historic**; the element has not been seen for at least 20 years, but suitable habitat still exists.
GX	All sites are **extirpated;** this element is extinct in the wild.
GXC	Extinct in the wild; exists in cultivation.
G1Q	The element is very rare, but there is a taxonomic question associated with it.
Subspecies Level: Subspecies receive a **T-rank** attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety. * For example: *Chorizanthe robusta* var. *hartwegii* is ranked G2T1. The G-rank refers to the whole species range (*Chorizanthe robusta*), whereas the T-rank refers only to the global condition of the variety (var. *hartwegii*).	
State Ranking (S)	
S1	Less than 6 element occurrences OR less than 1,000 individuals OR less than 809.4 ha (2,000 ac). S1.1 = very threatened S1.2 = threatened S1.3 = no current threats known
S2	6 to 20 element occurrences OR 3,000 individuals OR 809.4 to 4,047 ha (2,000 to 10,000 ac). S2.1 = very threatened S2.2 = threatened S2.3 = no current threats known..
S3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac). S3.1 = very threatened S3.2 = threatened S3.3 = no current threats known
S4	Apparently secure within 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 to ineradicable in California. NO THREAT RANK.
SH	All California sites are **historic**; the element has not been seen for at least 20 years, but suitable habitat still exists.
SX	All California sites are **extirpated;** this element is extinct in the wild.
Notes	
1. Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take an aerial view when ranking sensitive elements rather than simply counting element occurrences.	
2. Uncertainty about the rank of an element is expressed in two major ways: by expressing the rank as a range of values (e.g. S2S3 means the rank is somewhere between S2 and S3), and by adding a ? to the rank (e.g. S2?). This represents more certainty than S2S3, but less than S2.	

SPECIAL-STATUS BOTANICAL RESOURCES

This subsection provides the results of the special-status botanical resources survey and literature search conducted for Lyons Canyon Ranch. This subsection gives the status of all special-status plant species and habitats known and tracked in the vicinity of the project site, and provides a description of the special-status plant species observed onsite.

Figure 19, Distribution of CNDDB-Tracked Sensitive Species and Habitats in the Vicinity of Lyons Canyon Ranch, generally illustrates the distribution of special-status biological resources in the vicinity of the project site as tracked by CDFG's CNDDB (CDFG 2005). Figure 20, Special-Status Biological Resources Observed at Lyons Canyon Ranch, gives the locations of the special-status plant and wildlife species observed onsite and maps the sensitive habitats observed at the project site.

Special-Status Plant Species

Table 12, Special-Status Plant Species with Potential to Occur at Lyons Canyon Ranch, lists all special-status plant species known to occur in the vicinity of the project site. Included in Table 12 is each species' scientific name, common name, status, required habitat, and likelihood of occurrence.

No federally or state listed plant species were observed at Lyons Canyon Ranch; however, 26 special-status plant species have the potential to occur in the vicinity of the project site. Of these 26 special-status plant species, 23 are tracked for the Lyons Canyon Ranch vicinity by CDFG's (2005) CNDDB RareFind3, while the remaining three (3) are considered species of local concern (Boyd 1999). Seven (7) special-status plant species were observed onsite, including:

- *Ambrosia confertiflora* (Weakleaf Burweed);
- *Calochortus clavatus* var. *gracilis* (Slender Mariposa Lily);
- *Calochortus plummerae* (Plummer's Mariposa Lily);
- *Calystegia peirsonii* (Peirson's Morning-glory);
- *Ericameria ericoides* ssp. *ericoides* (Mock Heather);
- *Juglans californica* var. *californica* (Southern California Black Walnut); and
- *Navarretia hamata* ssp. *hamata* (Skunk Navarretia).

Another six (6) special-status plant species are considered likely to occur onsite, based on suitable required habitat present onsite, and the CNDDB results for special-status wildlife species tracked in the vicinity of the project site (CDFG 2005).

Voucher specimens were collected by BonTerra Consulting and/or Bowland & Associates for *Ambrosia confertiflora*, *Calystegia peirsonii*, *Calochortus plummerae*, and *Calochortus clavatus* var. *gracilis*, and deposited in at RSA to "ensure accuracy in identification" and provide verifiable vouchers.

Figure 19. Distribution of CNDDB-Tracked Sensitive Species and Habitats in the Vicinity of Lyons Canyon Ranch (CDFG 2005)

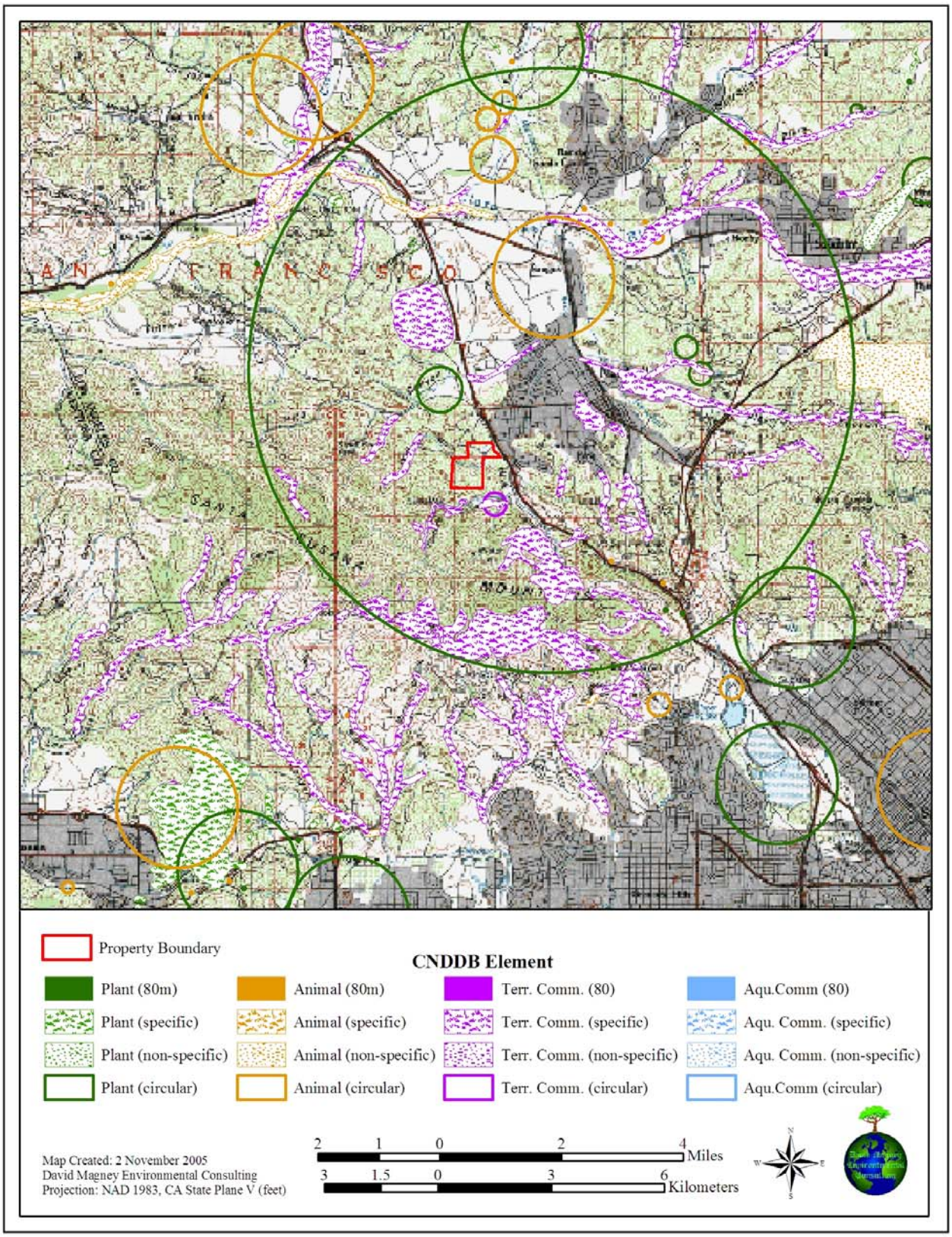

Figure 20. Special-Status Biological Resources Observed at Lyons Canyon Ranch

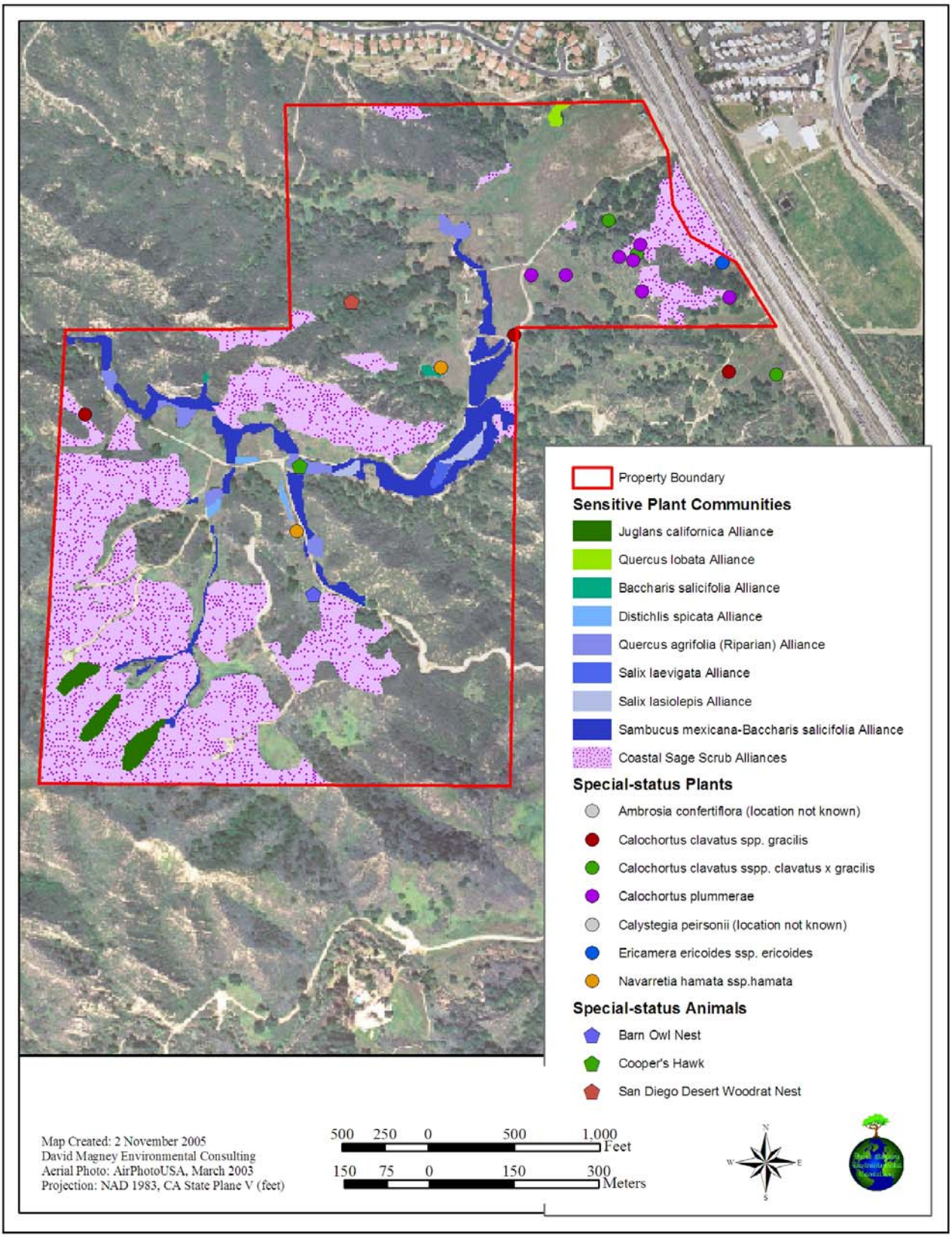

Table 12. Special-Status Plant Species with Potential to Occur at Lyons Canyon Ranch

Scientific Name[10]	Common Name	Federal[11]	State	G-Rank	S-Rank	CNPS List	CNPS R-E-D[12]	Habitat Requirements[13]	Likelihood of Occurrence[14]
Ambrosia confertiflora	**Weakleaf Burweed**	-	-	-	-	-	Species of local concern	Gr	**Known:** Observed by BonTerra Consulting onsite. No indication as to the location or abundance observed onsite. The population found represents the northernmost known occurrence of *Ambrosia confertiflora* in Los Angeles County and one of only eight known populations in the County. Only one (likely extirpated) population exists in Ventura County.
Aster greatae	Greata's Aster	-	-	G2	S2.3	1B	2-1-3	Ch, OW	Likely
Astragalus brauntonii	Braunton's Milkvetch	E	-	G2	S2.1	1B	3-3-3	Cl-cCF, Ch, CSS, Gr	Possible
Berberis nevinii	Nevin's Barberry	E	E	G2	S2.2	1B	3-3-3	Ch, OW, CSS, RS.	Unlikely. Recorded population in San Franciscito Canyon was likely planted by Theodore Paine after the dam disaster of the 1930s and is not a natural population (Boyd 1989)/

[10] Bold = special-status plant species known onsite.

[11] Federal and State Listings: E = Endangered; T = Threatened; R = Rare; C = Candidate.
For special-status species definitions see Tables 8 through 11 above.

[12] Species of local concern designations are presented here based onreporting by Boyd (1999).

[13] Habitat requirements definitions: AFSS = Alluvial Fan Sage Scrub; Cl-cCF = Closed-cone Coniferous Forest; Ch = Chaparral; ChenScrub = Chenopod Scrub; CSS = Coastal Sage Scrub; Gr = Grassland; JTW = Joshua Tree Woodland; LMCF = Lower Montane Coniferous Forest; MDS = Mojavian Desert Scrub; OW = Oak (Cismontane) Woodland; PJW = Pinyon-Juniper Woodland; RS/W = Riparian Scrub/Woodland; so. Calif. = southern California.

[14] Likelihood of occurrence based on species' habitat requirements and the presence of required habitat in the project site.
Known = the species has been reported as inhabiting or frequenting the project site;
Likely = Required habitat exists at the project site and has been reported near by;
Possible = Marginal required habitat exists onsite, and/or required habitat exists in surrounding areas;
Unlikely = Required habitat does not exist at the project site nor does it exist nearby.

Scientific Name[10]	Common Name	Federal[11]	State	G-Rank	S-Rank	CNPS List	CNPS R-E-D[12]	Habitat Requirements[13]	Likelihood of Occurrence[14]
Calochortus clavatus* var. *gracilis	**Slender Mariposa Lily**	-	-	G4T1	S1.1?	1B	3-2-3	Ch, CSS	**Known**: Approximately 600 individuals of *Calochortus clavatus* var. *gracilis* were observed by BonTerra Consulting and Bowland & Associates in the northeastern portion of the project site south of Lyons Ranch Road, in the middle portion of the project site on the southeast side of "Lyons Ranch Road", and in the southeastern corner of the project site just west of The Old Road.
Calochortus plummerae	**Plummer's Mariposa Lily**	-	-	G3	S3.2	1B	2-2-3	CSS, Ch, Gr, OW, LMCF	**Known**: 26 individuals observed by Bowland & Associates and approximately 1,100 individuals observed by BonTerra. These individuals were observed in the southeastern corner of the project site just west of The Old Road, in the mid-eastern portion of the project site, and in the northeastern portion near the intersection of The Old Road and Lyons Ranch Road.
Calystegia peirsonii	**Peirson's Morning-glory**	-	-	G3	S3.2	4	1-2-3	Ch, CSS, ChenScrub, OW, LMCF	**Known**: Occasional individuals reported as observed by BonTerra Consulting. No indication was made as to where this species was observed onsite.
Chorizanthe parryi var. *fernandina*	San Fernando Valley Spineflower	C	E	G2T1	S1.1	1B	3-3-3	CSS	Possible
Deinandra minthornii	Santa Susana Tarplant	-	R	G2	S2.2	1B	2-2-3	Ch, CSS	Unlikely
Dodecahema leptoceras	Slender-horned Spineflower	E	E	G1	S1.1	1B	3-3-3	Ch, CSS (AFSS)	Unlikely
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's Dudleya	-	-	G2T2	S2.1	1B	2-3-2	CSS, coastal bluff scrub, Gr. Found with direct coastal or maritime influence.	Unlikely
Dudleya multicaulis	Many-stemmed Dudleya	-	-	G2	S2.1	1B	1-2-3	Ch, CSS, Gr	Unlikely

Scientific Name[10]	Common Name	Federal[11]	State	G-Rank	S-Rank	CNPS List	CNPS R-E-D[12]	Habitat Requirements[13]	Likelihood of Occurrence[14]
Ericameria ericoides* ssp. *ericoides	**Mock Heather**	-	-	-	-	-	Species of local concern	CSS; inland sandy soils	**Known:** The presence of this species so far inland represents a significant disjunction, and is treated here as a locally rare species. One individual was observed by DMEC in the northeastern-most corner of the project site, along The Old Road, in *Eriogonum fasciculatum* Alliance. Its presence is possibly a waif that may have been included in a hydroseed mix applied for erosion control on the road cut immediately south of Lyon Canyon, along with the non-indigenous *Eriogonum fasciculatum* var. *fasciculatum* at this site.
Erodium macrophyllum	Round-leaved Filaree	-	-	G4	S2.1	2	2-3-1	Cismontane woodland, Gr	Likely
Harpagonella palmeri var. *palmeri*	Palmer's Grapplinghook	-	-	G4	S3.2	4	1-2-1	Ch, CSS, Gr	Possible
Helianthus nuttallii ssp. *parishii*	Los Angeles Sunflower	-	-	G5TH	SH	1A	-	Coastal salt and fresh-water marshes and swamps.	Unlikely: Presumed extinct. Historical from So. California. Possibly rediscovered at Newhall Ranch in 2003.
Horkelia cuneata ssp. *puberula*	Mesa Horkelia	-	-	G4T2	S2.1	1B	2-3-3	Ch, OW, CSS	Likely
Juglans californica* var. *californica	**Southern California Black Walnut**	-	-	G3	S3.2	4	1-2-3	Ch, CSS, OW	**Known**: Occasional individuals observed by BonTerra Consulting and DMEC in the southwestern corner of the project site.
Lepidium virginicum var. *robinsonii*	Robinson's Peppergrass	-	-	G5T2?	S2.2	1B	3-2-2	Ch, CSS	Likely
Malacothamnus davidsonii	Davidson's Bush Mallow	-	-	G1	S1.1	1B	2-2-3	CSS, RW, Ch	Possible
Navarretia fossalis	Spreading Navarretia	T	-	G2	S2.1	1B	2-3-2	Vernal pools, ChenScrub, marshes & swamps, playas	Unlikely

Scientific Name[10]	Common Name	Federal[11]	State	G-Rank	S-Rank	CNPS List	CNPS R-E-D[12]	Habitat Requirements[13]	Likelihood of Occurrence[14]
Navarretia hamata* ssp. *hamata	**Skunk Navarretia**	-	-	-	-	-	Species of local concern	Dry sandy or rocky sites in Ch	**Known:** Approximately 50 individuals were observed by DMEC near the "empty pond" in the middle portion of the project site in Ruderal Grassland Alliance. It is considered a locally rare species in Ventura County (Magney 2005) and is not reported in the Liebre Mountains flora by Boyd (1999). No collections are reported this far north in LA County in the Jepson Herbarium database for this variety.
Nolina cismontana	Chaparral Nolina	-	-	G1	S1.1	1B	3-2-3	Ch, CSS	Likely
Opuntia basilaris var. *brachyclada*	Short-joint Beavertail	-	-	G5T1	S1.2	1B	3-2-3	Ch, JTW, MDS, PJW, RW	Unlikely
Orcuttia californica	California Orcutt Grass	E	E	G2	S2.1	1B	3-3-2	Vernal pools	Unlikely
Senecio aphanactis	Rayless Ragwort	-	-	G3?	S1.2	2	3-2-1	OW, CSS	Likely

Observed Special-Status Plant Species

Seven (7) special-status plant species were observed onsite. A brief description of the special-status plant species observed during the focused surveys is presented below.

AMBROSIA CONFERTIFLORA (WEAKLEAF BURWEED)

Ambrosia confertiflora (Weakleaf Burweed) is a species of local concern (Boyd 1999). This small shrub usually blooms during the summer. It ranges spottily from San Francisco County south to San Diego County and inland to San Bernardino and Riverside Counties. This species was observed and vouchered by BonTerra Consulting onsite. No indication was provided as to the location observed onsite, nor the abundance or population size observed onsite. The population found on Lyons Canyon Ranch represents the northernmost known occurrence of *Ambrosia confertiflora* in Los Angeles County and one of only eight known populations (based on Jepson Herbarium database search) in the County. Only one (likely extirpated) population exists in Ventura County (Marr Ranch in Simi Valley – *A.C. Sanders 22916* UCR[15]).

CALOCHORTUS CLAVATUS VAR. *GRACILIS* (SLENDER MARIPOSA LILY)

Calochortus clavatus var. *gracilis* (Slender Mariposa Lily) is a CNPS List 1B species. This perennial bulbiferous herb typically blooms between March and May. It is found in canyons in chaparral below approximately 762 meters. All known occurrences are in Los Angeles County, with many locations in the Liebre Mountains. It is widespread, but only infrequently common locally in open scrub and especially on recent burns; it more or less freely grades into var. *clavatus*. Approximately 600 individuals of *Calochortus clavatus* var. *gracilis* were observed by BonTerra Consulting and Bowland & Associates in the northeastern portion of the project site south of Lyons Ranch Road, in the middle portion of the project site on the southeast side of "Lyons Ranch Road", and in the southeastern corner of the project site just west of The Old Road (Figure 20).

CALOCHORTUS PLUMMERAE (PLUMMER'S MARIPOSA LILY)

Calochortus plummerae (Plummer's Mariposa Lily) is a CNPS List 1B species. This perennial bulbiferous herb typically blooms between May and July. It is found in dry rocky places and in brush below approximately 5,000 feet above msl, in coastal sage scrub and yellow pine forest vegetation communities. It is locally scarce on rocky slopes and alluvial fans. Twenty-six (26) individuals of *Calochortus plummerae* were observed by Bowland & Associates, and approximately 1,100 individuals were observed by BonTerra Consulting. These individuals were observed in the southeastern corner of the project site just west of The Old Road, in the mid-eastern portion of the project site, and in the northeastern portion near the intersection of The Old Road and Lyons Ranch Road (Figure 20).

CALYSTEGIA PEIRSONII (PEIRSON'S MORNING-GLORY)

Calystegia peirsonii (Peirson's Morning-glory) is a CNPS List 4 species. This perennial rhizomatous herb typically blooms between May and June. It is found on dry slopes from approximately 3,000 to 4,500 feet above msl, in creosote bush scrub and Joshua Tree Woodland

[15] UCR = University of California, Riverside Herbarium

vegetation communities. This species is a climbing vine also found in openings in Coastal Sage Scrub and chaparral, typically following a burn. *Calystegia peirsonii* occurs in the San Gabriel and Liebre Mountains and in the Antelope Valley. It was known only from a few collections prior to 1970 (Boyd 1999), but it is now believed to be more abundant in Coastal Sage Scrub throughout the Newhall-Mint Canyon region. Occasional individuals were observed by BonTerra Consulting. No location was indicated onsite.

ERICAMERIA ERICOIDES SSP. *ERICOIDES* (MOCK HEATHER)

Ericameria ericoides ssp. *ericoides* (Mock Heather) is a species of local concern (Boyd 1999, Magney 2001). This small shrub typically blooms during the summer. It is found usually on stabilized sand dunes along the coast. This shrub ranges from Marin County south to Los Angeles County. *Ericameria ericoides* typically occurs along the coast and its presence this far inland represents a significant disjunction and extralimital occurrence, and is therefore considered a locally rare species. One (1) individual of this species was observed by DMEC in the northeastern-most corner of the project site, along The Old Road, in *Eriogonum fasciculatum* Alliance (Figure 20). It is possible that its presence along The Old Road represents a waif that was included in a hydroseed mulch applied for erosion control on the road cut immediately south of Lyon Canyon, along with the introduced *Eriogonum fasciculatum* var. *fasciculatum* (native to California, but not indigenous to this region) at this site.

The fact that three species of *Ericameria* have been reported as occurring onsite raises questions about proper identification of one or more of the species, since all three species are morphologically similar. However, a search of the Jepson Herbarium online database found that *E. pinifolia* has been collected from Elizabeth Lake in the Liebre Mountains to the north south to Pacoima, including in Newhall both north and south of Lyon Canyon. Furthermore, *E. palmeri* var. *pachylepis* has been collected in the Newhall area, north and east of the project site.

JUGLANS CALIFORNICA VAR. *CALIFORNICA* (SOUTHERN CALIF. BLACK WALNUT)

Juglans californica var. *californica* (Southern California Black Walnut) is a CNPS List 4 species. This perennial deciduous tree typically blooms between March and May. It is found on slopes, canyons and valleys from approximately 200 to 3,000 feet above msl. This species occurs in Orange County, and from western cismontane San Bernardino County to Ventura County. Occasional individuals (a few small stands) were observed by BonTerra Consulting and DMEC in the southwestern corner of the project site (Figure 20).

NAVARRETIA HAMATA SSP. *HAMATA* (SKUNK NAVARRETIA)

Navarretia hamata ssp. *hamata* (Skunk Navarretia) is a species of local concern (Boyd 1999, Mangey 2001). Skunk Navarretia is a small annual herb that blooms during the late spring and early summer. *Navarretia hamata* ssp. *hamata* ranges from Santa Cruz County south to San Diego County along the coast and inland within Riverside and San Bernardino Counties below 500 meters. Approximately 50 individuals of *N. hamata* ssp. *hamata* were observed by DMEC near the "empty pond" in the middle portion of the project site in Ruderal Grassland Alliance (Figure 20). This taxon is treated as a locally rare species. It is considered a locally rare species in Ventura County (Magney 2005) and is not reported in the Liebre Mountains flora by Boyd

(1999). No collections are reported this far north in Los Angeles County in the Jepson Herbarium online database for this variety.

Sensitive Plant Communities

Table 13, Sensitive Habitats Tracked in the Vicinity of Lyons Canyon Ranch, lists the sensitive habitat types that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by Federal, State, and local government conservation programs.

Fourteen (14) of the sensitive habitats listed below are tracked by CNDDB (CDFG 2005), while Coast Live Oak Woodland is protected by the Los Angeles County Oak Tree Ordinance. Eight (8) of those 15 sensitive habitat types were observed onsite by DMEC biologists.

Table 13 provides the Holland classification used by CNDDB as well as the Sawyer and Keeler-Wolf (1995) classification. Refer to the Habitat Description section (above in Section 2, Setting) for complete descriptions of the sensitive habitat types that were identified within the project site.

SPECIAL-STATUS WILDLIFE RESOURCES

Sitxy (60) special-status wildlife species have the potential to occur on Lyons Canyon Ranch, based on known occurrences in the vicinity of the project site. Table 14, Special-Status Wildlife Species with Potential to Occur at Lyons Canyon Ranch, provides a summary of those 60 special-status wildlife species tracked in the project region. Table 14 also provides information on the status, habitat requirements, and likelihood of occurrence.

No federal or state listed wildlife species were observed at Lyons Canyon Ranch; however, four special-status wildlife species were observed or detected onsite or immediately adjacent to the project site. Three special-status wildlife species were observed or detected by DMEC, including: Cooper's Hawk (*Accipiter cooperi*) flying overhead, San Diego Desert Woodrat (*Neotoma lepida intermedia*) detected by a nest, and Oak Titmouse (*Baeolophus inornatus*). The fourth species, Nuttall's Woodpecker (*Picoides nuttallii*), was observed in Towsley Park by Wendy Langhans with the Mountains Recreation and Conservation Authority (Wendy Langhans, pers. comm. 21 July 2005).

It should also be noted that DMEC observed an occupied Barn Owl (*Tyto alba*) nest in a Coast Live Oak (*Quercus agrifolia* ssp. *agrifolia*) tree onsite. Barn Owl is not a special-status species (and therefore is not listed in Table 14 below); however, all active raptor nests (of common or special-status species) are regulated by California Fish and Game Code Sections 3503, 3503.5, and 3513.

Of the 60 species tracked in the project region, 19 special-status wildlife species are *likely* to occur onsite, based on suitable required habitat present onsite, and based on the CNDDB search results for special-status wildlife species tracked in the vicinity of the project site (CDFG 2005).

Table 13. Sensitive Habitats Tracked in the Vicinity of Lyons Canyon Ranch

Habitat Name (Holland 1986, CDFG 2005)	**Alliance Name Described Above in Habitat Descriptions** (Sawyer and Keeler-Wolf (1995)	**G-Rank**[16]	**S-Rank**	**Observed Onsite?**
Southern Calif Threespine Stickleback Stream	-	G?	S?	Not observed, and highly unlikely to occur onsite.
Cismontane Alkali Marsh	*Distichlis spicata* Alliance	G2	S2.1	**Observed onsite**. Dense patches of this alliance were observed on the boundary of riparian communities; however, the characteristic associate species for Cismontane Alkali Marsh were not present.
Southern Riparian Scrub	*Sambucus mexicana-Baccharis salicifolia* Alliance	G3	S3.2	**Observed onsite**.
Riversidian Alluvial Fan Sage Scrub	*Lepidospartum squamatum* Alliance	G1	S1.1	Not observed, but could possibly occur onsite.
Southern Willow Scrub	*Salix* Alliance	G3	S2.1	Not observed, but could possibly occur onsite.
Southern Mixed Riparian Forest	*Salix lasiolepis* Alliance *Salix laevigata* Alliance	G2	S2.1	**Observed onsite**.
Southern Cottonwood Willow Riparian Forest	*Populus fremontii-Salix* Alliance	G3	S3.2	Not observed, and unlikely to occur onsite.
Southern Sycamore-Alder Riparian Woodland	*Platanus racemosa-Alnus rhombifolia* Alliance	G4	S4	Not observed, but could potentially occur onsite, especially after several years of wildfire succession.
Southern Coast Live Oak Riparian Forest	*Quercus agrifolia* Alliance	G4	S4	**Observed onsite**.
Coast Live Oak Woodland	*Quercus agrifolia* Alliance	n/a	n/a	**Observed onsite**.
Valley Needlegrass Grassland	*Nassella pulchra* Alliance	G1	S3.1	The habitat not observed onsite, only patches of *Nassella* observed in transition between grassland and scrub plant communities onsite.
Coastal Sage Scrub	*Sambucus mexicana-Salvia leucophylla* Alliance *Salvia leucophylla* Alliance *Salvia apiana* Alliance	n/a	n/a	**Observed onsite**.
California Walnut Woodland	*Juglans californica* var. *californica* Alliance	G2	S2.1	**Observed onsite**.
Mainland Cherry Forest	*Prunus ilicifolia* Alliance	G1	S1.1	Not observed, and unlikely to occur onsite.
Valley Oak Woodland	*Quercus lobata* Alliance	G3	S2.1	**Observed onsite**. Emergent Valley Oak trees observed in small stand in northeastern portion of the property.

[16] For special-status definitions see Tables 8 through 11 above.

Table 14. Special-Status Wildlife Species with Potential to Occur at Lyons Canyon Ranch

Scientific Name	Common Name[17]	Fed.[18]	State	G-Rank	S-Rank	CDFG	Habitat Requirements[19]	Likelihood of Occurrence[20]
FISH								
Catostomus santaanae	Santa Ana Sucker	T	-	G1	S1	SC	Endemic to Los Angeles basin south coastal streams.	Unlikely
Gasterosteus aculeatus williamsoni	Unarmored Threespine Stickleback	E	E	G5T1	S1	-	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small so. Calif. streams.	Unlikely
Gila orcutti	Arroyo Chub	-	-	G2	S2	SC	Los Angeles basin south coastal streams.	Unlikely
AMPHIBIANS								
Bufo californicus	Arroyo Toad	E	-	G2G3	S2S3	SC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Possible
Rana aurora draytonii	California Red-legged Frog	T	-	G4T2 T3	S2S3	SC	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Unlikely
Rana muscosa	Mountain Yellow-legged Frog	E	-	G2	S2	SC	Federal listing refers to populations in the San Gabriel, San Jacinto & San Bernardino Mountains only. Always encountered within a few feet of water. Tadpoles may require up to 2 years to complete their aquatic development.	Unlikely
Spea (=Scaphiopus) hammondii	Western Spadefoot	-	-	G3	S3	SC	Occurs primarily in Gr habitats, but can be found in valley-foothill hardwood woodlands in the Central Valley and Coast Ranges from Point Conception, Santa Barbara County south to San Diego County. Rarely observed outside of the breeding season. They breed in vernal pools and other ponds. Has declined substantially throughout its range.	Possible
Taricha torosa torosa	Coast Range Newt	-	-	G5T4	S4	SC	Coastal drainages from Mendocino County to San Diego County.	Unlikely

[17] * = Nesting habitat protected. ** = Wintering site protected.
[18] Federal and State Listings: E = Endangered; T = Threatened; R = Rare; C = Candidate; FSC = Federal Species of Concern. CDFG Listing: SC = California Species of Concern; FP = Fully Protected; SPM = Specially Protected Mammal.
For special-status species definitions see Table 5.6-s 8 through 11 above.
[19] Habitat requirements definitions: Ch = Chaparral; CSS = Coastal Sage Scrub; Gr = Grassland; JTW = Joshua Tree Woodland; PJW = Pinyon-Juniper Woodland; RS/W = Riparian Scrub/Woodland; so. Calif. = southern California.
[20] Likelihood of occurrence based on species' habitat requirements and the presence of required habitat in the project site.
Known = the species has been reported as inhabiting or frequenting the project site;
Likely = Required habitat exists at the project site and has been reported nearby;
Possible = Marginal required habitat exists onsite, and/or required habitat exists in surrounding areas;
Unlikely = Required habitat does not exist at the project site nor does it exist nearby.

Scientific Name	Common Name[17]	Fed.[18]	State	G-Rank	S-Rank	CDFG	Habitat Requirements[19]	Likelihood of Occurrence[20]
REPTILES								
Anniella pulchra pulchra	Silvery Legless Lizard	-	-	G3G4 T3T4 Q	S3	SC	Sandy or loose loamy soils under sparse vegetation. Beneath soil, under stones, logs, debris, or in leaf litter. Inhabits moist soil, dry washes, woodlands, riparian, and scrub types at < 5,000 feet elevation within Coast, Transverse, and Peninsular ranges and northwestern Baja Calif.	Likely
Aspidoscelis tigris stejnegeri	Coastal Western Whiptail	-	-	G5T3 T4	S2S3	-	Found in deserts & semiarid areas w/ sparse vegetation and open areas. Also found in woodland & riparian areas in sandy or gravelly substrate. Occurs in the coastal region of so. Calif. south to central Baja Calif., Mexico. Prey includes terrestrial insects. Has apparently declined due to loss of habitat.	Likely
Charina trivirgata	Rosy Boa	-	-	G4G5	S3S4	-	Habitats with a mix of brushy cover and rocky soil such as coastal canyons and hillsides, desert canyons, washes and mountains.	Likely
Coleonyx variegatus abbotti	San Diego Banded Gecko	-	-	G5T3 T4	S2S3	-	Coastal and cismontane southern California. Found in granite or rocky outcrops in Coastal Sage Scrub and chaparral habitats.	Likely
Emys (=Clemmys) marmorata pallida	Southwestern Pond Turtle	-	E	G3G4 T2T3 Q	S2	SC	Inhabits permanent or nearly permanent bodies of water in many habitat types; below 6,000 ft elev. Occurs in freshwater rivers, streams, lakes, ponds, vernal pools, and seasonal wetlands requiring water depths > 6 feet and basking sites such as logs & banks. Occurs from Monterey Bay south through the Coast Ranges to northern Baja Calif. Current range is similar to the historic range, but populations fragmented by agriculture and urban development.	Unlikely
Phrynosoma coronatum (blainvillei)	San Diego Horned Lizard	-	-	G4T3 T4	S2S3	SC	Inhabits open CSS and Ch in arid and semi-arid climate conditions. Prefers loose, friable soil for burrowing. Has declined due to loss of habitat, over-collecting, and introduction of exotic ants. Occurs in Transverse Ranges in Kern, Los Angeles, Santa Barbara, and Ventura Counties southward into the Peninsular Ranges to Baja Calif.	Likely
Salvadora hexalepis virgultea	Coast Patch-nosed Snake	-	-	G5T3	S2S3	SC	Brushy or shrubby vegetation in coastal so. Calif. Its Calif. range is from San Luis Obispo and Kern Counties south to San Diego County. Inhabits open sandy areas with rocky outcrops within scrub, grassland, and woodland vegetation types. It occurs < 7,000 feet in elevation. Nearest known populations to project site are in the watershed of Santa Clara River.	Likely
Thamnophis hammondii	Two-striped Garter Snake	-	-	G3	S2	SC	Coastal Calif. from vicinity of Salinas to northwest Baja Calif. From sea to about 7,000 ft elevation. Occurs from Monterey County south to northwest Baja Calif. This highly aquatic snake occurs in freshwater marsh and riparian habitats with perennial water. Prey consists of small fishes, frogs, and tadpoles. The nearest known populations to the project site are in the watershed of the Santa Clara River.	Possible

Scientific Name	Common Name[17]	Fed.[18]	State	G-Rank	S-Rank	CDFG	Habitat Requirements[19]	Likelihood of Occurrence[20]
BIRDS								
Accipiter cooperii	**Cooper's Hawk***	-	-	G5	S3	SC	(Nesting) woodland, chiefly of open, interrupted or marginal. An uncommon year-round resident in so. Calif. Prefers woodland habitats but can also be found in virtually any habitat during migration. Typical breeding habitat in so. Calif. consists of riparian and oak woodlands, but also nests in ornamental woodlands provided by parks.	**Known:** Observed by DMEC flying overhead.
Accipiter striatus	Sharp-shinned Hawk*	-	-	G5			(Nesting) Ponderosa Pine, Black Oak, riparian woodland, mixed conifer & Jeffrey Pine habitats. Prefers riparian areas. Fairly common winter resident in so. Calif. and a rare summer resident in the mountains.	Possible
Agelaius tricolor	Tricolored Blackbird*	-	-	G5	S3	SC	(Nesting colony) highly colonial species, most numerous in Central Valley & vicinity. Endemic to Calif.	Unlikely
Aimophila ruficeps canescens	Southern California Rufous-crowned Sparrow	-	-	G5T2 T4	S2	SC	Resident in so. Calif. CSS and sparse Mixed Ch. Prefer slopes with rock outcroppings.	Likely
Ammodramus savannarum	Grasshopper Sparrow	-	-	G5	S2	-	(Nesting) dense grasslands on rolling hills, lowland plains, in valleys & on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs & scattered shrubs. Loosely colonial when nesting.	Likely
Amphispiza belli ssp. *belli*	Bell's Sage Sparrow*	-	-	G5T2 T4	S2?	SC	(Nesting) nests in Ch dominated by fairly dense stands of Chamise. Found in CSS, often with stands of cactus (*Opuntia* sp.), in south of range. An uncommon to fairly common local resident in the interior foothills of coastal so. Calif.	Likely
Aquila chrysaetos	Golden Eagle*	Federal Bald Eagle Act.	-	G5	S3	SC, FP	(Nesting & wintering) rolling foothills, mountains, sage-juniper flats, desert. Uncommon year-round resident in so. Calif. Typically nests on rocky cliff ledges or trees, but also rarely on the ground.	Possible
Asio flammeus	Short-eared Owl	-	-	G5	S3	SC	(Nesting) found in swamplands, both fresh and salt; lowland meadows; irrigated alfalfa fields.	Unlikely
Asio otus	Long-eared Owl*	-	-	G5	S3	SC	(Nesting) riparian bottomlands grown to tall willows & cottonwoods; also, belts of oak paralleling stream courses. Uncommon resident in the deserts, and is quite rare coastally. Declined throughout Calif., but the most pronounced reductions have occurred in the southwestern part of the state with a minimum 55 percent decline.	Likely
Athene cunicularia	Western Burrowing Owl	-	-	G4	S2	SC	(Burrow sites) open, dry annual or perennial Gr, deserts & scrublands characterized by low-growing vegetation.	Possible

Scientific Name	Common Name[17]	Fed.[18]	State	G-Rank	S-Rank	CDFG	Habitat Requirements[19]	Likelihood of Occurrence[20]
Baeolophus inornatus	**Oak Titmouse**	-	-	G5	S3?	-	Oak woodlands. Cavity nester.	**Known:** one individual observed by DMEC
Buteo regalis	Ferruginous Hawk**	-	-	G4	S3S4	SC	(Wintering) open Gr, sagebrush flats, desert scrub, low foothills & fringes of PJW. Occurs as a winter resident in Calif. Occupies open, dry habitats such as grasslands, shrublands, rangelands, and, in winter, plowed agricultural fields.	Possible: unlikely to nest onsite, but may occur as rare migrant
Buteo swainsoni	Swainson's Hawk*	-	-	G5	S2	-	(Nesting) breeds in stands with few trees in juniper-sage flats, riparian areas and in oak savannah.	Possible
Calypte costae	Costa's Hummingbird	-	-	G5	S3?	-	(Nesting) desert riparian, desert and arid scrub foothill habitats.	Likely
Campylorhynchus brunneicapillus sandiegensis	Coastal Cactus Wren	-	T	G5T2 T3Q	S2S3	SC	So. Calif. CSS. Wrens require tall *Opuntia* cactus for nesting and roosting.	Unlikely
Carduelis lawrencei	Lawrence's Goldfinch	-	-	G3G4	S3	-	(Nesting) nests in open oak or other arid woodland and chaparral, near water. Nearby herbaceous habitats used for feeding. Closely associated with oak trees.	Likely
Chondestes grammacus	Lark Sparrow	-	-	G5	S?	-	(Nesting). For nesting they prefer edges between grasslands & trees or bushes or open grassy oak woodlands. Scattered trees or shrubs required for lookout, song perches & cover.	Likely
Circus cyaneus	Northern Harrier*	-	-	G5	S3	SC	(Nesting) coastal salt & freshwater marsh. Nest & forage in Gr, from Saltgrass in desert sink to mountain cienagas. Fairly common winter resident in so. Calif., but a very scarce and local breeder. Nests on the ground in a variety of wetland and upland habitats.	Likely
Coccyzus americanus occidentalis	Western Yellow-billed Cuckoo*	C	-	G5T2 Q	S1	-	(Nesting) riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Unlikely
Dendroica petechia brewsteri	Western Yellow Warbler*	-	-	G5T3?	S2	SC	(Nesting) riparian plant associations. Prefers *Salix*, *Populus*, *Platanus*, & *Alnus* for nesting & foraging.	Possible
Elanus leucurus	White-tailed Kite*	-	-	G5	S3	-	(Nesting) rolling foothills/valley margins w/scattered oaks & river bottomlands or marshes next to deciduous woodland. Uncommon locally, but fairly common year-round resident on the coast of so. Calif. Requires open habitats, such as grasslands, marshlands, and agricultural fields with nearby trees for perching and nesting.	Possible

Scientific Name	Common Name[17]	Fed.[18]	State	G-Rank	S-Rank	CDFG	Habitat Requirements[19]	Likelihood of Occurrence[20]
Empidonax traillii extimus	Southwestern Willow Flycatcher*	E	-	G5T1 T2	S1	-	(Nesting) RW in so. Calif. State listing includes all subspecies. Declined drastically due to a loss of breeding habitat and nest parasitism by Brown-headed Cowbirds. This species occurs in riparian habitats along rivers, streams, or other wetlands. On 12 October 2004, USFWS published a Final Rule designating critical habitat for this species. Approximately 99.8 river miles in Kern, Riverside, San Bernardino, and San Diego counties were designated for this species. The project site is not located within the designated critical habitat area for Southwestern Willow Flycatcher.	Unlikely suitable riparian habitat minimal for nesting requirements.
Eremophila alpestris actia	California Horned Lark	-	-	G5T3	S3	SC	Coastal regions, chiefly from Sonoma to San Diego Co. Also main part of San Joaquin Valley & east to foothills. In so. Calif., this subspecies is a fairly common breeding resident in grasslands and dry, open habitats.	Possible
Falco columbarius	Merlin**	-	-	G5	S3	SC	(Wintering) seacoast, tidal estuaries, open woodlands, savannahs, edges of Gr & deserts, farms & ranches. Uncommon fall migrant and rare winter resident in so. Calif. It prefers open to semi-open habitat for breeding and foraging.	Possible
Falco mexicanus	Prairie Falcon*	-	-	G5	S3	SC	(Nesting) inhabits dry, open terrain, either level or hilly. Uncommon year-round resident in the interior of so. Calif. An increasingly scarce winter resident and very rare summer resident along the coast of so. Calif. Prefers dry open habitats such as grasslands and ag fields.	Possible
Icteria virens	Yellow-breasted Chat	--	-	G5	S3	SC	(Nesting) summer resident; inhabits riparian thickets of willow & other brushy tangles near watercourses.	Unlikely
Lanius ludovicianus	Loggerhead Shrike	-	-	G4	S4	SC	(Nesting) broken woodlands, savannah, PJW, JTW, & RW, desert oases, scrub & washes. Widely distributed across North America but has declined throughout most of its range in recent decades. Has recently declined in its Calif. population. Found perched on fences and posts from which prey items can be seen hanging from a sharp object such as a barbed-wire fence.	Likely
***Picoides nuttallii* (nesting)**	**Nuttall's Woodpecker**	-	-	G5S?	-	-	Prefers mesic habitats. Occupies chaparral plant communities mixed with scrub oak, wooded canyons, and riparian woodlands. Forages on tree trunks, probing crevices and chipping away loose bark.	**Known:** reported by Wendy Langhans (pers. comm. 21 July 2005)

Scientific Name	Common Name[17]	Fed.[18]	State	G-Rank	S-Rank	CDFG	Habitat Requirements[19]	Likelihood of Occurrence[20]
Polioptila californica californica	Coastal California Gnatcatcher	T	-	G3	S2	SC	Obligate, permanent resident of several distinct alliances of CSS below 2500 ft in so. Calif. Brood parasitism by Brown-headed Cowbird and loss of habitat to urban development have caused population decline. On 24 October 2000, USFWS published a Final Rule to designate critical habitat for this species. On 24 April 2003, the USFWS published a Proposed Rule re-evaluating the boundaries. They proposed to designate 495,795 acres of land as critical habitat. The project site is not located within designated or proposed critical habitat areas for this species.	Possible: Prior to Fire, project site provided suitable CSS habitat. When suitable CSS recovers, focused surveys recommended.
Toxostoma redivivum	California Thrasher	-	-	G5S?	-	-	Chaparral-covered foothills.	Likely
Vireo bellii pusillus	Least Bell's Vireo*	E	E	G5T2	S2	-	(Nesting) summer resident of so. Calif. in low riparian near water or dry river bottoms; < 2000 ft. Breeds primarily in riparian habitats dominated by willows (*Salix* spp.) with dense understory vegetation. A dense shrub layer two to ten feet above ground is the most important habitat characteristic for this species. On 2 February 1994, the USFWS published a final critical habitat for this species, designating approx. 37,560 acres of land in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego counties, Calif. The project site is not located within the designated critical habitat area.	Unlikely: Simi Fire took suitable habitat. When suitable riparian habitat recovers onsite, focused surveys for this species are recommended.
MAMMALS								
Antrozous pallidus	Pallid Bat	-	-	G5	S3	SC	Deserts, Gr, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting. A locally common year-round resident at low elevations throughout most of Calif. Forages primarily on the ground for large insects. Roosting habitat consists of caves, crevices, mines, and occasionally hollow trees and buildings.	Possible
Bassariscus astutus	Ring-tailed Cat	-	-	G5	(S2)	SC, FP	Never far from water. Found in rocky dry areas such as chaparrals and deserts from southwestern Wyoming to central Mexico. Occasionally will live in woodlands. This species makes nests of leaves and grass, and lives in caves, hollow tree trunks, abandoned burrows, or in buildings.	Likely
Corynorhinus townsendii pallescens	Pale Big-eared Bat	-	E	G4T4	S2S3	SC	Lives in a wide variety of habitats but most common in mesic sites. One of two subspecies of Townsend's Big-eared Bat that occur throughout most of Calif. Pale Big-eared Bat occurs in the southern part of the state and occupies a variety of habitats including oak woodlands, arid deserts, grasslands, and high-elevation forests and meadows. Known roosting sites in Calif. include mine tunnels, limestone caves, lava tubes, and buildings. The roosts support larger breeding colonies and are especially susceptible to disturbance.	Possible

Scientific Name	Common Name[17]	Fed.[18]	State	G-Rank	S-Rank	CDFG	Habitat Requirements[19]	Likelihood of Occurrence[20]
Euderma maculatum	Spotted Bat	-	-	G4	S2S3	SC	Occupies a wide variety of habitats from arid deserts and Gr through mixed conifer forests. Feeds over water and along washes. Needs rock crevices in cliffs or caves for roosting.	Unlikely
Eumops perotis californicus	Western Mastiff Bat	-	-	G5T4	S3?	SC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, CSS, Gr, & Ch. An uncommon year-round resident at low elevations in California. The largest bat in North America, roosts in small colonies in crevices on cliff faces or very large boulders. This species forages over far distances from roost sites and can forage as high as 2,000 feet above ground.	Likely
Puma concolor	Mountain Lion	FSC	-	G5	(S3)	SC, SPM	From sea level to 10,000 feet. Typical habitat is steep, rocky canyon country, or mountainous terrain. Male territories range from 15 to 30 square miles, and females range from 5 to 20 square miles, depending on the number of young. They may hunt in a radius of 30 to 50 miles. Mountain Lion territory sometimes is not one large area, but rather several separate ones connected by pathways.	Likely
Lepus californicus bennettii	San Diego Black-tailed Jackrabbit	-	-	G5T3?	S3?	SC	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges.	Possible
Macrotus californicus	California Leaf-nosed Bat	-	-	G4	S2S3	SC	Desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub & palm oasis habitats. Known to occur from Riverside, Imperial, San Diego, and San Bernardino counties south to the Mexican border. Former populations have disappeared from coastal basins, in Los Angeles to San Diego counties. Prefers to roost in caves and mines, but may also roost in bridges or buildings.	Possible
Myotis yumanensis	Yuma Myotis	-	-	G5	S4?	-	Optimal habitats are open forests & woodlands w/ sources of water over which to feed. A common and widespread year-round resident in Calif. Found near ponds, stream, and lakes. Roosting habitat consists of buildings, mines, caves, crevices, and under bridges.	Possible
Neotoma lepida intermedia	**San Diego Desert Woodrat**	-	-	G5T3?	S3?	SC	Coastal so. Calif. from San Diego to San Luis Obispo Counties. Occupies arid areas with sparse vegetation (Coastal Sage Scrub and Desert Scrub). This subspecies of Desert Woodrat is restricted to the Pacific slope in a range that stretches from SLO County to northwestern Baja Calif.	**Known/ Detected**: Nest observed by DMEC in the northern portion of project site.
Onychomys torridus ramona	Southern Grasshopper Mouse	-	-	G5T3?	S3?	SC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrubs.	Possible
INVERTEBRATES								
Danaus plexippus	Monarch Butterfly	-	-	G5	S3	-	Winter roost sites extend along the coast from northern Mendocino to Baja Calif., Mexico.	Possible

Observed Special-Status Wildlife Species

DMEC observed three special-status wildlife species. A brief description of the special-status wildlife resources observed during the biological resources surveys are presented in the following paragraphs.

*Cooper's Hawk (*Accipiter cooperii*)*

Cooper's Hawk is a California Species of Concern. DMEC observed one individual Cooper's Hawk flying overhead onsite during biological surveys. This raptor has a long, rounded, and barred tail, and short rounded wings. Its back is dark gray or gray-brown, with underparts barred reddish and white. Cooper's Hawk is an uncommon year-round resident in southern California. The Cooper's Hawk prefers woodland habitats but can also be found in virtually any habitat during migration. Typical breeding habitat in southern California consists of riparian and oak woodlands, but it also nests in ornamental woodlands provided by parks and other urban habitats. This medium-sized hawk preys primarily on medium-sized birds and mammals. The project site provides suitable foraging, as well as nesting habitat for the Cooper's Hawk.

Cooper's Hawks live in dense canopied evergreen and deciduous forests or in riparian zones throughout southern Canada and the continental United States (The Peregrine Fund World Center for Birds of Prey at http://www.peregrinefund.org/Explore_Raptors/hawks/cooperhk.html). Declines of the Cooper's Hawk in the late 1940s and 1950s were blamed on DDT and pesticide contamination. Populations started increasing in the late 1960s, but it is still listed as threatened or of special concern in a number of states. Thi species appears to be adapting to breeding in urban areas, which may help increase populations. (Cornell Lab of Ornithology 2003 at http://www.birds.cornell.edu/programs/AllAboutBirds/BirdGuide/Coopers_Hawk.html.)

*Barn Owl (*Tyto alba*) Nest*

A Barn Owl (*Tyto alba*) was observed flying from a nest in a Coast Live Oak tree onsite in the south central portion of the project site. The nest appeared to be occupied and active. Although Barn Owl has no protection as a species, all raptor nests are protected by the California Fish and Game Code Section 3503.5. Barn Owl has a body length of 14 - 20 inches, a $3^{1}/_{2}$-foot wingspan, and weighs 8 - 21 ounces. Barn Owls are nearly cosmopolitan, living in North America, South America, Europe, Africa, India, Southeast Asia, and Australia. Their northern range is limited by the severity of winter weather and food availability. These owls prefer open lowlands with some trees, including farmlands, plantations, urban areas, various forest types, semiarid shrub lands, and marshes. (The Peregrine Fund World Center for Birds of Prey athttp://www.peregrinefund.org/Explore_Raptors/owls/barnowl.html.)

*Oak Titmouse (*Baeolophus inornatus*)*

An Oak Titmouse was also observed by DMEC in a Coast Live Oak tree onsite in the south central portion of the project site. This species is listed with a Global-rank of G5, and a State-rank of S3?. Oak Titmouse lives year-round in warm, dry, intact oak or oak-pine woodlands. Loss of natural cavities for this sedentary species is affecting populations. Oak Titmouse is brownish-gray tinged with a plain face and short crest, and measures 5.75 inches in length. Oak

Titmouse gives a repeated series of three to seven syllables, each comprised of one low and one high note. Its year-round range is from southwest Oregon through California to northwestern Baja California, Mexico, where it breeds in low to middle elevations. Though the bird clearly prefers open oak and pine-oak woodlands, populations have adapted locally to warm, dry environments without oaks. It nests in mostly natural cavities and sometimes in old woodpecker holes. Females build nests with grass, moss, feathers, shredded bark, and other material mostly from mid-March through April. The bird requires an elevated perch from which to forage, and changes its feeding strategy to correspond with the seasons. Oak Titmouse declined 1.9% per year throughout California from 1980 through 1996. Oak Titmouse experienced a 1.6% annual decline in the California foothills from 1966 through 1996. Habitat loss from development is the greatest threat to the species. (Summarized from National Audubon Society [2002] available at: http://audubon2.org/webapp/watchlist/viewSpecies.jsp?id=148.)

*Nuttall's Woodpecker (*Picoides nuttallii*)*

A Nuttall's Woodpecker was observed at Towsley Park by Wendy Langhans, with the Mountains Recreation and Conservation Authority (Wendy Langhans, pers. comm. 21 July 2005). This species is listed with a Global-rank of G5S?. Nuttall's Woodpecker is a small black and white woodpecker 6.75 inches in length with a black-and-white barred back, wings and outer tail. The underparts are white with spotted flanks, and the face is black and white with white patch above bill (rear crown patch is red in males). This bird is resident from northern California to Baja California. Scrub oak communities, oak woodlands, and streamside growth are the preferred habitats of this species (Field Guide to Birds of North America, 2002-2005, Mitch Waite Group, available at: http://identify.whatbird.com/obj/182/_/Nuttalls_Woodpecker.aspx). Nuttall's Woodpecker behaves like large nuthatches, foraging on the trunks and branches of oaks and other trees, creeping diagonally as they search in crevices and underneath bark. They often hang upside down under limbs as they probe for insect prey (http://www.mbr-pwrc.usgs.gov/id/framlst/i3970id.html).

*San Diego Desert Woodrat (*Neotoma lepida intermedia*) Nest*

San Diego Desert Woodrat (*Neotoma lepida intermedia*) is a California Species of Concern. A nest of this rodent was observed by DMEC during small mammal trapping onsite, but the species was not observed nor did small mammal trapping confirm its presence except for the observation of the apparently active nest. San Diego Desert Woodrat has a compact body, long tail, large ears, and large, slightly bulging, black eyes. Their feet are strongly built for grasping. This species has a pale to dark gray wash with yellow above, light undersides, grayish to yellowish below, and gray at the base of the throat region. Their tail, over half of the body length, is distinctively bicolored. Their hind feet are white. These woodrats live in high desert areas, chaparral, sagebrush flats, and Pinyon-Juniper Woodland. San Diego Desert Woodrat is vulnerable to predation by coyotes, raccoons, owls, gopher and rattlesnakes, and hawks. Populations may be impacted by habitat loss to agricultural and urban development, isolation, fragmentation of habitats, and wildfires, especially in cactus areas. (Aquarium of the Pacific Animal Data Base 2005.)