BIOLOGICAL TECHNICAL REPORT: PROPOSED SECONDARY ACCESS ROAD, MARTIN RANCH PROJECT, SAN BERNARDINO CALIFORNIA

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INTRODUCTION

The City of San Bernardino is considering approval of a residential development called Martin Ranch in the San Bernardino Mountain foothills east of Devore. This report was prepared to evaluate potential impacts to biological resources of a proposed secondary access route to the Martin Ranch property. Biological resources on the Marin Ranch site itself have been addressed in a report prepared by PCR Services Corporation (1999) and updated by White and Leatherman BioServices (in prep.).

The proposed access route originates on Meyers Road at the southwestern corner of the Martin Ranch property; follows Meyers road to the northwest for about 0.4 mile, then follows an unnamed unpaved road to the southwest about 0.6 miles until it reaches the I-215 frontage road (Map 1). Township, Range and Section are not shown on the USGS topographic maps. Elevation ranges from about 1900 feet at the southwestern end of the route to about 2160 feet at the junction of Meyers road and the unnamed unpaved road. Topography is a moderately sloped alluvial fan with one steep section midway between the southwestern end and the junction of Meyers road and the unnamed unpaved road. The route crosses the Cable Creek channel about 0.2 mile northeast of the southwestern end. This channel is shown as an intermittent blueline stream on the USGS topographic maps. Project development would widen and resurface the route along its entire length.

The proposed access route is within the Cajon Pass "Policy Area" in the Open Space Element to the San Bernardino County General Plan (San Bernardino County Planning Dept. 1991), and within designated critical habitat for San Bernardino kangaroo rat (USDI FWS 2002a). It also was designated by the Fish and Wildlife Service as critical habitat for California gnatcatcher, but that rule has been set aside in court pending re-designation of critical habitat for the species.

METHODS

Scott D. White reviewed available literature to identify special status plants, animals, or plant communities known from the project site and vicinity. Literature reviewed included the California Natural Diversity Data Base (CNDDB 2001), California Native Plant Society's *Inventory of Rare and Endangered Vascular Plants of California* (Tibor 2001), maps of designated critical habitat for California gnatcatcher and San Bernardino kangaroo rat provided by the US Fish and Wildlife Service, and compendia of special status species published by the US Fish and Wildlife Service (1999) and California Department of Fish and Game (2001a, 2001b). Appendix 1 lists special status species known from comparable habitats within the region and summarizes their natural history, agency status, and occurrence probability on-site.

Based on the literature review, we concluded that focused surveys to determine presence or absence of listed threatened or endangered species would be needed. These surveys included: (1) San Bernardino kangaroo rat, (2) California gnatcatcher, (3) slender-horned spineflower, and (4) Santa Ana River woollystar. Field methodology for each are described below. Descriptions of habitat, and species lists of plants and animals noted in the area, were completed during these focused surveys.

Slender-horned spineflower and Santa Ana River woollystar: Scott D. White walked the entire length of the proposed route on 10 April and 6 June 2002 to search for these two state and federally listed endangered plant species. This methodology provided complete coverage of the entire route and is consistent with survey methodology recommended by the California Native Plant Society (Tibor 2001). The surveys were scheduled to conform to time of year when the species of concern could be detected (slender horned spineflower is a low-growing annual species which is difficult to find before it flowers or after it dries; Santa Ana River woollystar is a low shrub which can be recognized throughout the year). Surveys were "floristic in nature"; that is, all plant species seen were recorded in field notes. Plants of uncertain identity were collected and subsequently identified from keys, descriptions and illustrations in Abrams (1923, 1944, 1951), Abrams and Ferris (1960), Hickman (1993) and Munz (1974). Species lists are included as an Appendix to this report.

The 2001-2002 rainfall year was one of the driest on record for much of southern California, including the San Bernardino area. Many annual plants and perennial herbs could not be found this year due to extreme drought. Conclusions regarding presence or absence of special status plants are generally based on habitat suitability rather than determinations based on field surveys.

California gnatcatcher: Field surveys for California gnatcatcher were completed during the breeding season between 26 March and 28 May 2002 by Brian Leatherman, following protocol recommended by the US Fish and Wildlife Service. His report is attached as an appendix to this report.

San Bernardino kangaroo rat: Nocturnal trapping surveys for San Bernardino kangaroo rat were completed between 25 and 30 March 2002 by Shana Dodd, following protocol recommended by the US Fish and Wildlife Service. Dodd's report is attached as an appendix to this report.

RESULTS

Vegetation and Habitat

The proposed access route consists of existing paved and unpaved roads. Adjacent habitat is generally coastal sage scrub vegetation growing on the alluvial fans and benches below Cable Canyon and Meyers Canyon of the western San Bernardino Mountain foothills, and extending

downslope to the Cajon Wash alluvial plain. The alluvial fan is no longer subject to scouring floods from Cajon Wash due to flood control improvements, raised railroad lines, and the Interstate 215 Freeway. Thus, vegetation on the site was likely typical of "alluvial fan sage scrub" historically, but now its structure and composition are more typical of upland coastal sage scrub of the inland valleys. For example, scalebroom (*Lepidospartum squamatum*), the most characteristic shrub of alluvial fan sage scrub, occurs only occasionally along the route. Instead, shrubland vegetation is dominated by upland coastal sage scrub species including California buckwheat (*Eriogonum fasciculatum*), deerweed (*Lotus scoparius*), California sagebrush (*Artemisia californica*). Scattered chaparral shrubs, including chamise (*Adenostoma fasciculatum*) and sugarbush (*Rhus ovata*) also occur. A few California black walnut trees (*Juglans californica*) and Mexican elderberry (*Sambucus mexicana*) emerge above the shrubland canopy. The northernmost portion of the dirt road is on a plateau or alluvial bench above the level of the more recently scoured southern portion of the road. Vegetation is slightly different on this norther portion, where white sage (*Salvia apiana*), yerba santa (*Eriodictyon trichocalyx*) and Douglas wallflower (*Erysimum capitatum*) are common. Vegetation along both the northern and southern parts of the unpaved road (i.e., a linear distance of about 0.6 miles) is best characterized as coastal sage scrub.

Cable Creek, where it crosses the proposed route, supports scattered cottonwood (*Populus fremontii*), California sycamore (*Platanus racemosa*), willow (*Salix lasiolepis*), and mulefat (*Baccharis salicifolia*) with poison oak (*Toxicodendron diversilobum*) growing beneath them. No surface water was seen at the channel crossing, but the stream runs year around about 1.5 miles upstream, where it is diverted into a pipeline.

Vegetation adjacent to the portion of the route along Meyers Road, which is paved, includes some coastal sage scrub, as described above, and windrows of eucalyptus trees.

Upland habitat on the property and along the access route supports a typical array of shrubland wildlife species, including California quail, scrub jay, western whiptail, dusky-footed woodrat, coyote, and mule deer. Riparian vegetation is sparse and is unlikely to support nesting birds of more extensive riparian forests or shrublands, but may serve as a "stopover site" for migratory birds and as perch and roost sites for many species, including raptors.

Special Status Species

Plants or animals may be considered "sensitive" due to declining populations, vulnerability to habitat change, or restricted distributions. Certain sensitive species have been listed as threatened or endangered under state or federal Endangered Species Acts. Others are included in lists compiled by the California Dept. of Fish and Game, US Fish and Wildlife Service, or private conservation organizations. Special status plants and animals known from the general area and elevational range are listed in Appendix 1, with brief descriptions of their habitats, seasonality, agency status, and likelihood of occurring on the site.

Special Status Plants: No state or federally-listed threatened or endangered plant species were observed on the project site. Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*) and slender-horned spineflower (*Dodecahema leptocerus*) are the two listed species of particular importance for these surveys. Santa Ana River woollystar is a shrub which can be recognized year-around (even in years of poor rainfall) by its overall structure, leaf shape, and inflorescence form. It was not observed during field surveys and we conclude that it is absent from the proposed route.

Slender-horned spineflower is an ephemeral annual species and is difficult to find outside its flowering season and the few weeks that follow. In this year of exceptionally poor rainfall, its seeds may not have germinated. It occurs on mature alluvial deposits, long-undisturbed by flooding or other disturbance, generally with chaparral shrubs, but in open areas. It sometimes occurs with natural soil crusts of lichens and blue-green algae. It generally does not occur with high cover of annual grasses, though a few sites are exceptions to this generality. The most consistent habitat characteristics are the ages of the alluvial deposits (Wood, no date) and low salinity and nutrient availability (Allen 1996). The nearest recorded location is near the Devore Fire Station, about 1 mile west of the proposed route. Habitat along the proposed route is unlike typical spineflower habitat, since it generally is dominated by shrubland species typical of coastal sage scrub (rather than chaparral or alluvial shrublands) with relatively high cover. Open areas between shrubs generally have high cover of weedy annual grasses. Chaparral shrubs are scattered through the area, but there is no open chaparral vegetation with low annual grass cover among the shrubs, as is typical of slender-horned spineflower habitat. We conclude that the habitat is only marginally suitable for slender-horned spineflower and that there is a low probability that it may occur there, though it likely would not have germinated this year due to low rainfall.

Southern California black walnut (*Juglans californica* var. *californica*), a species on the California Native Plant Society's "watch list," occurs occasionally on the alluvial plain near the proposed access route, but not immediately adjacent to the proposed route itself.

A few other special status plants were not observed, but may occur with likelihoods ranging from low to high. Those with a moderate or greater probability of occurring on the site are: Plummer's mariposa lily (*Calochortus plummerae* high probability, probably a few plants in undisturbed shrublands) and Parry's spineflower (*Chorizanthe parryi* var. *parryi*, moderate probability in open sites in shrublands). Other sensitive plants known from the region occur in other habitat types, well above or below the site's elevation, or so distant that they are unlikely to occur on the study site.

Special Status Wildlife: Based on habitat, geographic range, elevation, and the attached reports on focused surveys, we conclude that no state or federally-listed threatened or endangered wildlife species occur on the site, with the exception of a Swainson's hawk observed on the site during migration. Several special status species not listed as threatened or endangered were detected during these surveys.

Amphibians: We conclude that no special status amphibians occur on the proposed route (see Appendix 1).

Reptiles: Coastal western whiptail occurs in shrublands along the proposed route, and several other special status reptiles could occur, with probabilities ranging from moderate to high. These include San Diego banded gecko, California silvery legless lizard, San Diego horned lizard, rosy boa, San Bernardino ringneck snake, California glossy snake, and coast patch-nosed snake. None of these species is listed as threatened or endangered under state or federal Endangered Species Acts or meets criteria for listing; instead, they are generally regarded as species of special concern by the California Department of Fish and Game (see Appendix 1).

Birds: A Swainson's hawk was observed at the site during one of the focused surveys for California gnatcatcher. Swainson's hawk is listed as threatened under the California Endangered Species Act. It is a migratory raptor, spending winters in South America. All known nesting locations are well to the north of San Bernardino County. Swainson's hawks regularly migrate

through our area, but do not nest locally. No other listed threatened or endangered birds occur along the route.

Other listed birds known from the general area are generally limited to riparian habitats (e.g., southwestern willow flycatcher, least Bell's vireo) or coastal sage scrub (California gnatcatcher), We conclude that California gnatcatcher is absent from the project site based on the results of a focused survey (attached). Southwestern willow flycatcher and least Bell's vireo could briefly visit the site during migration, but we conclude that they are absent during breeding season.

Sensitive birds observed along the alignment include olive-sided flycatcher (migratory but not resident), cactus wren (resident), black-chinned sparrow (breeding season only), rufous-crowned sparrow, chipping sparrow, and Lawrence's goldfinch (all resident). Other special status birds, listed below, were not observed but could occur on the site or use it for foraging. These include burrowing owl (low probability, open places), loggerhead shrike (high probability, throughout), Bell's sage sparrow (high probability, shrubland), grasshopper sparrow, black-chinned sparrow. None of these species is listed as threatened or endangered under state or federal Endangered Species Acts or meets criteria for listing; instead, they are generally regarded as species of special concern by the California Department of Fish and Game (see Appendix 1).

Many migratory birds, including some sensitive species, might use the site briefly during spring or fall; these include southwestern willow flycatcher, least Bell's vireo, yellow warbler, and yellow-breasted chat. Several sensitive raptors might forage over the site, particularly during winter, but do not nest on the site. These include white-tailed kite, northern harrier, golden eagle, ferruginous hawk, sharp-shinned hawk, Cooper's hawk, merlin, and prairie falcon.

Mammals: No listed mammals occur along the route, but several special status mammals were documented on the site during trapping surveys for San Bernardino kangaroo rat. These were: San Diego pocket mouse, Los Angeles pocket mouse, and San Diego desert woodrat. All three are California Species of Special Concern. San Diego pocket mouse and San Diego desert woodrat are relatively widespread in southern California and do not meet criteria for state or federal listing.

Los Angeles pocket mouse is poorly known, but apparently is nearly restricted to shrublands with sandy soils in the Inland Empire region (reviewed by Patten et. al. 1993). The Department of Fish and Game (2002a) indicates that it is known from fewer than 6 occurrences, but qualifies this ranking with a question mark. Its populations seem to fluctuate widely, and it probably spends winters in a state of torpor; thus, it may often go undetected even on sites where it occurs. Its limited geographic range, occurrence in habitats subject to extensive ongoing land use conversions, and poorly known ecology support its status as a Species of Special Concern. Los Angeles pocket mouse often overlaps in its distribution and habitat with the listed endangered San Bernardino kangaroo rat, and ongoing efforts to preserve this habitat will likely also favor long-term persistence of Los Angeles pocket mouse. Based on the present state of knowledge, Los Angeles pocket mouse does not meet criteria for state or federal listing.

Other special status mammals not seen during surveys but likely to use the site include San Diego black-tailed jackrabbit (high probability) and American badger (high probability, but uncommon). Also, several sensitive bats could use the site for foraging or roosting (Appendix 1).

PROJECT IMPACTS

Project approval and subsequent construction would result in grading, widening, and paving the existing roads. Under CEQA Guidelines (California Code of Regulations 1999, sect.5065) a lead agency must conclude that a project would have a significant effect on the environment if

any of the following would occur (italics added):

(a) The project has the potential to substantially degrade the quality of the environment, *substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminage a plant or animal community, reduce the number or restrict the range or an endangered, rare, or threatened species*, or eliminate important examples of California history or prehistory.

(b) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

(c) The project has possible environmental effects which are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of probable future projects as defined in Section 15130 [of CEQA].

CEQA guidelines (section 15380) provide several definitions of endangered, rare, or threatened as they apply here, including listing as threatened or endangered under either state or federal Endangered Species Acts or meeting criteria for listing, quoted below:

(b) A species of animal or plant is:
(1) "Endangered" when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or
(2) "Rare" when either:
(A) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or
(B) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the Federal Endangered Species Act.
(c) A species of animal or plant shall be presumed to be endangered, rare or threatened, as it is listed in:
(1) Sections 670.2 or 670.5, Title 14, California Code of Regulations [i.e., state Endangered Species Act]; or
(2) Title 50, Code of Federal Regulations Section 17.11 or 17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered.
(d) A species not included in any listing identified in subsection (c) shall nevertheless be considered to be endangered, rare or threatened, if the species can be shown to meet the criteria in subsection (b).

Thus, a species need not be listed as rare, threatened, or endangered to meet mandatory criteria for significance in terms of CEQA, but its rarity or vulnerability to extinction must be similar to listing criteria under the state and federal Endangered Species Acts. These criteria are generally met for species included on the Fish and Wildlife Service's list of "candidate" species (formerly "category 1 candidates") or in special cases where new information becomes available (e.g., when a previously unknown threat is identified or when a species formerly considered extinct is rediscovered). Adverse impacts to other special status plants and animals (e.g., the Department of Fish and Game's "species of special concern," or many of the California Native Plant Society's "List 1B" plants) generally do not meet these mandatory CEQA criteria for significance, though local agencies may apply less stringent criteria in judging significance. Thus, impacts to "species of special concern," or "List 1B" plants may be considered significant by local criteria.

Impacts to Sensitive Plants

One sensitive plant species, California black walnut, was observed near the proposed route. It does not occur immediately adjacent to the route, though, and there would be no need to remove trees or affect their root systems for the proposed road improvements. We conclude that there would be no impact to California black walnut.

No other special status plants were observed during field surveys, but there is low probability that the endangered slender-horned spineflower could occur in coastal sage scrub along the roadside. Also, Plummer's mariposa lily and Parry's spineflower have moderate or high probabilities of occurring along the route.

Impacts to slender-horned spineflower, if it occurs, would be considered significant in terms of CEQA. Impacts to the other two species do not meet CEQA criteria for significance.

Impacts to Sensitive Wildlife

Shrublands and trees along the route are occupied by several special status wildlife species (coastal western whiptail, olive-sided flycatcher, cactus wren, black-chinned sparrow, rufous-crowned sparrow, chipping sparrow, Lawrence's goldfinch, San Diego pocket mouse, Los Angeles pocket mouse, and San Diego desert woodrat) and there is potential for several others (San Diego banded gecko, California silvery legless lizard, San Diego horned lizard, rosy boa, San Bernardino ringneck snake, California glossy snake, coast patch-nosed snake burrowing owl, loggerhead shrike, Bell's sage sparrow, grasshopper sparrow, black-chinned sparrow, San Diego black-tailed jackrabbit, American badger, and several sensitive bats). Project development would incrementally affect shrubland habitat by removing it along the length of the roadway. Development may also necessitate the removal of some trees used for perch or nest sites by special status birds. These impacts would result in the loss of potential nesting or foraging habitat for these species in the narrow stip of native vegetation adjacent to the roadway. The project might also result in increased noise and disturbance to the habitat and wildlife occurring there due to increased vehicle traffic along the access route. None of the species occurring or potentially occurring have formal status under state or federal Endangered Species Acts and adverse impacts generally would not meet the CEQA criteria for mandatory findings of significance. One potential exception is the Los Angeles pocket mouse; while this animal does not clearly meet CEQA criteria for a mandatory finding of significance, its seeming rarity and narrow habitat and geographic ranges suggest that impacts may be regarded as significant. We conclude that the minimal amount of habitat to be affected by the access route construction will result in an impact below the CEQA significance threshold, though we note that the loss of a small amount of coastal sage scrub vegetation and potential loss of individual Los Angeles pocket mice should be regarded as an adverse impact to this species.

While we conclude that the listed endangered San Bernardino kangaroo rat is absent from the site, we note that the site is within designated critical habitat for this animal. The project would result in loss of a minimal amount of unoccupied but designated critical habitat. Without mitigation, loss of this habitat may be viewed by the US Fish and Wildlife Service (FWS) as "adverse modification," though it would not meet CEQA significance threshold described above. In its discussion of critical habitat, FWS (2002) identified four "primary constituent elements" of San Bernardino kangaroo rat habitat: (1) sandy or loamy soils, (2) alluvial scrub or associated vegetation, (3) landscapes subject to flooding processes, and (4) upland areas adjacent to such landscapes. The project site fulfills the first two elements, but no longer seems subject to significant flooding and is isolated from suitable active floodplains and terraces by the 215

Freeway (Dodd 2002, attached). Due to its location east of the 215 Freeway and the active flood channel in Cajon Wash, the site also does not appear to provide a suitable linkage between occupied or suitable habitat areas.

POTENTIAL MITIGATION MEASURES AND MONITORING

Adverse impacts to slender-horned spineflower, if it occurs along the route, would be considered significant in terms of CEQA.

Impacts to other special-status plants and animals would not meet CEQA significance criteria, but several measures might reasonably be taken to minimize or mitigate impacts. These are listed below:

1. Pre-construction survey for slender-horned spineflower. If access route improvements can be delayed until at least late spring 2003, then the route can be re-surveyed in another spring. Presuming that the 2003 rainfall year approaches average, then the follow-up survey will provide a substantial conclusion of present or absent for this plant. If the species occurs along the proposed route, then the applicant may wish to consider redesign to avoid the occurrence.

2. Contact the California Department of Fish and Game (CDFG) and Army Corps of Engineers (Corps) to determine whether the proposed route crossing at Cable Creek falls within the jurisdiction of either agency, under either Sections 1601-3 of the California Fish and Game Code or Section 404 of the federal Clean Water Act. If the Corps claims jurisdiction over the creek crossing, then they will be required to consult with the US Fish and Wildlife Service under Section 10 of the federal Endangered Species Act due to the potential for adverse modification to designated critical habitat for the endangered San Bernardino kangaroo rat. We recommend preparing a Habitat Conservation Plan to accompany the 404 application in order to mitigate any potential impacts to designated critical habitat.

3. In order to avoid incidental killing of birds protected under the Migratory Bird Treaty Act and the California Fish and Game Code, we recommend scheduling grading and brush removal of previously undisturbred habitat outside the breeding season (i.e., no vegetation removal should occur between early spring and mid summer).

Mitigation monitoring: California law requires monitoring for mitigation measures imposed under CEQA. Compliance with the mitigation measures recommended above could be verified by supplying a letter or report describing the follow-up plant survey and copies of correspondence with CDFG and the Corps to the Planning Department for approval prior to issuance of a grading permit.

CONCLUSION

CEQA requires the lead agency to reach findings regarding potentially significant impacts to biological resources. CEQA guidelines recommend addressing the six questions quoted below.

Would the project:

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

Some loss of suitable habitat for special status species would occur. One of the plant species (slender-horned spineflower) meets CEQA criteria for significance. Anticipated loss of other special status plants or wildlife would not be substantial and would not be significant in terms of CEQA. Incorporation of the mitigation measures described above would prevent

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

The route would cross an ephemeral stream channel (Cable Creek); construction would likely necessitate removal of one or two California sycamore trees. This effect to riparian habitat would be less than significant. Construction would also affect coastal sage scrub along most of the access route's length. This habitat is not occupied by California gnatcatcher or San Bernardino kangaroo rat. It probably is not occupied by slender-horned spineflower, though we cannot conclusively determine presence or absence due to the poor rainfall this year. We do not regard loss of coastal sage scrub along the proposed route as "substantial."

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

No impacts to jurisdictional wetlands would result from the proposed project. The ephemeral Cable Creek stream channel may meet state or federal jurisdiction and may be subject to permitting under Section 1601-3 of the state Fish and Game Code and Section 404 of the federal Clean Water Act. Implementing the mitigation measure recommend above would clarify agency jurisdiction. Impacts to the channel would not be significant in terms of CEQA.

d) interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No.

e) conflict with any local policies or ordinances protecting biological resources, such as a tree preserevation policy or ordinance?

White & Leatherman BioServices is unaware of any such conflict.

f) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

White & Leatherman BioServices is unaware of any such conflict.

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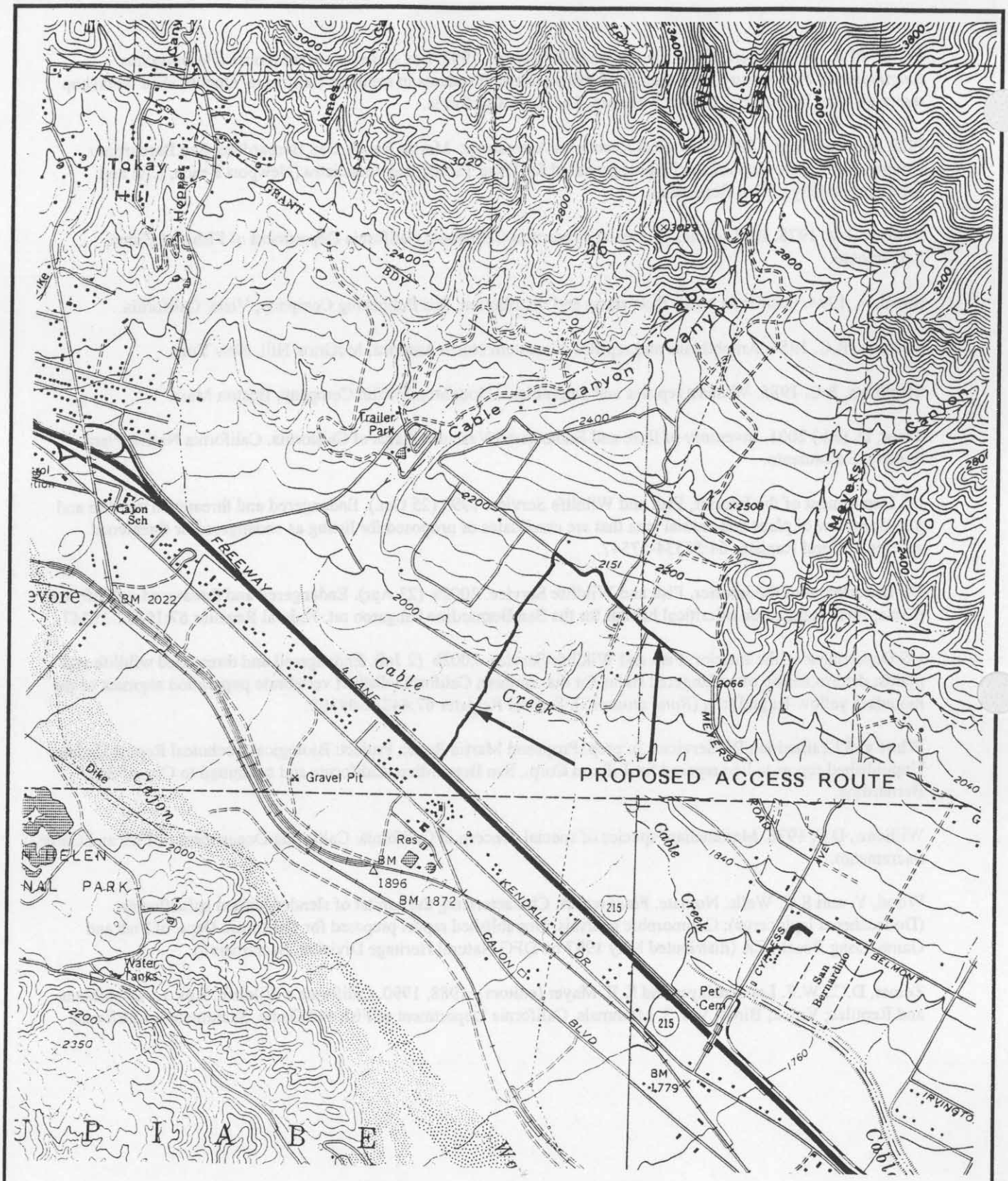

PROPOSED MARTIN RANCH SECONDARY ACCESS ROUTE

NORTH

Map source: USGS 7½ minute (1:24000) Devore and San Bernardino North topographic maps
SDW: 24 April 2002

APPENDIX 1: Special status species of Devore, northern San Bernardino, and San Bernardino Mountain foothills.

Special Status Plants	Habitat and Distribution[1]	Flower season[1]	Status Designation[2]	Occurrence Probability[3]	Anticipated impact	CEQA significance criteria
Arenaria paludicola Marsh sandwort	Freshwater marsh and bogs, historically from Wash. thr. LA Co. & SW San Bern. Co.; only extant sites are in SLO Co.; below about 1000 ft. elev.	May - August	Fed: **END** Calif: S1.1 **END** CNPS: List 1B R-E-D:3-3-2	Absent (no suitable habitat)	None	No
Berberis nevinii (*Mahonia nevinii*) Nevin's barberry	Coastal sage scrub, chaparral, oak woodland, usually below 2000 ft.; scattered localities in LA, San Bernardino, Riverside, and San Diego Cos.	Spring; (can be IDd all year)	Fed: **END** Calif: 2.2, **END** CNPS: List 1B R-E-D:3-3-3	Absent (survey results, probably outside geogr. range)	None	No
Brodiaea filifolia Thread-leaved brodiaea	Vernal pools and alkali sink in inland valleys; upland mesic heavy clay soils near coast; hot spring soils at Arrowhead Hot Spr; scattered locations in S Calif. foothills and valleys (LA Co inland to San Bern., S to San Diego Cos.), below ±2000 ft. elev.	May - June	Fed: **THR** Calif: S2.1 **END** CNPS: List 1B R-E-D:3-3-3	Absent (no suitable soils or mesic habitat)	None	No
Calochortus palmeri var. *palmeri* Palmer's mariposa lily	Meadows and other sites where water available in spring, ±3900-7200 ft. elev.; S Coast Ranges, Transverse Ranges	May - June	Fed: none Calif: S2.1 CNPS: List 1B R-E-D:2-2-3	Absent (no suitable habitat)	None	No
Calochortus plummerae Plummer's mariposa lily	Chaparral, alluvial fans, pine forest, below ±5600 ft. elev.; widespread but uncommon throughout S. Calif. mts., foothills & valleys	May - July	Fed: none Calif: S3.2 CNPS: List 1B R-E-D:2-2-3	High (all CSS habitat suitable)	Anticipated loss of a few isolated plants	No
Castilleja lasiorhyncha (*Orthocarpus lasiorhynchus*) San Bernardino Mountain owl's clover	Meadows, streamsides, seeps, other mesic sites, ±4200-7500 ft. elev.; S Calif. mtns.	June - July	Fed: none Calif: S2.2 CNPS: List 1B R-E-D:2-2-3	Absent (below elev. range; unsuitable habitat)	None	No

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Special Status Plants	Habitat and Distribution[1]	Flower season[1]	Status Designation[2]	Occurrence Probability[3]	Anticipated impact	CEQA significance criteria
Chorizanthe parryi var. *parryi* Parry's spineflower	LA, San Bern, Riv Cos.; "sandy places, gen in coastal or desert scrub," ±1000-4000 ft. elev. (Hickman, ed. 1993)	April - June	Fed: none Calif: S2.1 CNPS: List 3 R-E-D:?-2-3	Moderate (occurs in similar habitat in region)	Moderate probability of loss of a few isolated plants	No
Chorizanthe xanti var. *leucotheca* White-bracted spineflower	Desert shrubland, pinyon-juniper woodland, about 1000-4000 ft. elev.; E San Bernardino and N San Jacinto Mts. CNPS record in San Bernardino area.	April-June	Fed: none Calif: S1S2.2 CNPS: List 1B R-E-D:2-2-3	Low (may be outside geogr. range)	Low probability of loss of a few isolated plants	No
Cordylanthus maritimus ssp. *maritimus* Salt marsh bird's beak	Coastal salt marshes, Baja Calif. to San Luis Obispo Co. (local report presumably in error)	May - Oct	Fed: **END** Calif: **END** 2.1 CNPS: List 1B R-E-D:2-2-2	Absent (no suitable habitat, outside range)	None	No
Docecahema leptocerus (*Chorizanthe leptocerus, Centrostegia leptocerus*) Slender-horned spineflower	Open, sandy alluvial benches in valleys and canyons; San Fernando Vally, Santa Ana River Valley, western Riverside Co.; about 600-2200 ft. elev.	April - June	Fed: **END** Calif: S1.1 **END** CNPS: List 1B R-E-D:3-3-3	Low (marginal habitat, upper margin of elev. range)	See text	Possibly (depends on results of future survey, follow-up realignment if needed)
Eriastrum densifoloium ssp. *sanctorum* Santa Ana River woollystar	Shrubland, alluvial fans and plains; endemic to Santa Ana River watershed, primarily in San Bern. Co.; below about 2000 ft. elev.	May - Sept.	Fed: **END** Calif: S1.1 **END** CNPS: List 1B R-E-D:3-3-3	Absent (not seen; above known elev. range)	None	No
Fimbristylis thermalis Hot springs fimbristylis	Alkaline meadows near hot springs; San Bernardino Mts. (Arrowhead Hot Spr.), Sierra Nevada Mts. (Kern, Mono, Inyo Cos.), Nevada, and Arizona; wide elev. range	July - Sept.	Fed: none Calif: S2.2 CNPS: List 2 R-E-D:2-2-1	Absent (no suitable habitat)	None	No
Hemizonia laevis (*H. pungens* ssp. *laevis; Centromadia p.* ssp. *laevis*) Smooth tarplant	Seasonally wet low elev. grassland, also fallow fields, drainage ditches; primarily in SW Riv. Co. but a few sites in interior valleys of LA, San Bern., San Diego Cos.	April - Sept	Fed: none Calif: 2.1 CNPS: List 1B R-E-D:2-3-3	Absent (no suitable habitat, margin of geogr. range)	None	No

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Horkelia cuneata ssp. *puberula* Mesa horkelia	Shrublands, woodlands, gen sandy alluvial plains; SLO to San Diego Co, away from immediate coast; rarely inland to San Bern. Co., about 200-2300 ft. elev.	April - Sep.	Fed: none Calif: S2.1 CNPS: List 1B R-E-D:2-3-3	Low (field survey)	Low probability of loss of a few isolated plants	No
Juglans californica var. *californica* So. California black walnut	Walnut woodland, coastal sage scrub, chaparral, gen. < ±3000 ft. elev.; Ventura, LA, Orange, San Bernardino Cos.	Can be IDd all year	Fed: none Calif: S3.2 CNPS: List 4 R-E-D:1-2-3	Occurs (occa-sional, none immediately adj. to route)	None	No
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	Chaparral & coastal sage scrub below about 1700 ft. elev.; LA Co, inland to Riverside & San Bernardino Cos, and S to Baja Calif	Jan - July	Fed: none Calif: SH (error) CNPS: List 1B R-E-D:3-2-2	Absent (well above elev. range)	None	No
Lilium humboldtii var. *ocellatum* Ocellated Humboldt lily	Shaded forest, woodland, canyons, below about 6000 ft. elev.; cent. Coast Ranges and S Calif. mts.	June - July	Fed: none Calif: S3.2 CNPS: List 4 R-E-D:1-2-3	Absent (no suitable habitat)	None	No
Lilium parryi Lemon lily	Meadows and streambanks above about 4000 ft. elev.; mts. of S Calif. and SE Arizona	July - August	Fed: none Calif: S2.1 CNPS: List 1B R-E-D:2-2-2	Absent (no suitable hab-itat, below elev. range)	None	No
Lycium parishii Parish's desert thorn	Arid slopes and sand flats, below about 3300 ft. elev.; low desert (Riv. and San Diego Cos., Ariz., Sonora) and interior valleys (Riv Co.); historic locations in San Bernardino Valley now extinct	March - April	Fed: none Calif: S2S3 CNPS: List 2 R-E-D:2-1-1	Absent (geographic range; survey results)	None	No
Malacothamnus parishii Parish's bush mallow	Chaparral or coastal sage scrub; one historic occurrence (1895, now extirpated), in San Bernardino Valley; now presumed extinct	June - July	Fed: none Calif: SH CNPS: 1A	Absent (survey results; presumed extinct)	None	No

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Mucronea californica (*Chorizanthe californica*) California spineflower	Sandy soils, many habitats, below ±4500 ft. elev.; San Luis Obispo to San Diego Cos., inland to San Bernardino and Kern Cos.	April - July	Fed: none Calif: S3.2? CNPS: List 4 R-E-D:1-2-3	Low (survey results)	Low proba-bility of loss of a few isolated plants	No
Muhlenbergia californica California muhly grass	Stream banks and shaded rocky slopes above streams, 300-6500 ft. elev.; coastal and interior S Calif. valleys and mts	July - Sept.	Fed: none Calif: S3.3 CNPS: List 4 R-E-D:1-2-3	Absent (no suitable habitat)	None	No
Opuntia basilaris var. *brachyclada* Short-joint beavertail	Desert shrublands on N margins of San Bernardino and San Gabriel Mts. (Cajon Summit area), about 4000-6000 ft. elev.	May - June	Fed: none Calif: S1.2 CNPS: List 1B R-E-D:3-2-3	Absent (field survey)	None	No
Ribes divaricatum var. *parishii* Parish's gooseberry	Riparian woodland, historically from LA and San Bern. Cos., ± 300-1000 ft. elev.; possibly extinct (most recent obs. at Whittier Narrows, 1980)	Feb. - April	Fed: none Calif: S1.1 CNPS: List 1B R-E-D:3-3-3	Absent (no suitable habitat)	None	No
Schoenus nigricans Black sedge	Marshes, hot springs, gen. alkaline soils, below about 6600 ft. elev.; locally in San Bernardino Mts, Mojave Desert; widespread but uncommon in Amer Southwest; Europe and North Africa	Aug - Sep	Fed: none Calif: S2.2 CNPS: List 2 R-E-D:2-2-1	Absent (no suitable habitat)	None	No
Viola aurea Golden violet	Arid slopes and bajadas, Mojave Desert and adjacent mountains, about 3200-6000 ft.; one record from Cajon Pass, ca. 3800 ft. elev.	April - June	Fed: none Calif: S2S3 CNPS: List 2 R-E-D:2-2-1	Absent (below elev. and geogr range)	None	No

APPENDIX 1: Special status species of Devore, northern San Bernardino, and San Bernardino Mountain foothills.

Special Status Wildlife	Habitat and Distribution[1]	Activity season[1]	Status Designation[2]	Occurrence Probability[3]	Anticipated impact	CEQA significance criteria
FISH						
Rhinichthys osculus "subspecies 3" Santa Ana speckled dace	Endemic to Santa Ana and San Gabriel Riv. watersheds, historically in Big Tujunga Cyn. Sta Ana Riv populations in lower San Bernardino Mtn foothills and washes	year - around	Fed: none Calif: CSC S1	Absent (no aquatic habitat)	None	No
AMPHIBIANS						
Batrachoseps gabrieli San Gabriel Mts slender salamander	Mesic canyons and talus slopes, cismontane San Gabriel Mts and San Bernardino Mts, ca. 3000 - 5000 ft. elev.	winter	Fed: none Calif: S1	Absent (no suitable habitat)	None	No
Ensatina escschholtzii croceater Yellow-blotched salamander *E. eschscholtzii klauberi* Large-blotched salamander	Moist sites in forests, e.g. beneath fallen logs; ssp. *croceater* occurs in Tehachapi Mtns; *klauberi* in Transverse & Peninsular Ranges; intergrades between these sspp. occur in SB Mts.; ssp. *klauberi* hybridizes w/ ssp. *eschscholtzii* (no special status) in some areas.	Spring	Fed: none Calif: CSC S2S3	Absent (no suitable habitat)	None	No
Scaphiopus hammondii Western spadefoot toad	Breeds in quiet streams and vernal pools, burrows beneath sand during dry season; western Calif., Central Valley through Baja Calif.	Late winter - spring	Fed: none Calif: CSC S3?	Low (no known extant populations in San Bern. Co.)	Low probability of disturbing potential breeding habitat at Cable Ck crossing	No
Bufo californicus (*B. microscaphus calif.*) Arroyo toad	Alluvial washes, often xeric areas; desert margins and scattered locations in cismontane S Calif.	Late winter to spring	Fed: **END** Calif: CSC S2S3	Absent (insufficient surface flow, riparian veg, sand bars)	None	No
Rana aurora draytonii California red-legged frog	Pools in low-gradient foothill and valley streams to ±4000 ft.; few extant S. Calif. locations	Spring	Fed: **THR** Calif: CSC S2S3	Absent (no perennial surface water)	None	No

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Rana boylii Foothill yellow-legged frog	Foothill and montane streams to about 6000 ft. elev.; SW Oregon, Central Valley & NW Calif.; not known from SB Mts.; historic records in San Gabriel Mts. (Schoenherr 1976); possibly extinct in S Calif.	Spring	Fed: none Calif: CSC S2S3	Absent (no perennial surface water; outside historic range)	None	No
Rana muscosa Mountain yellow-legged frog	Perennial mountain streams above about 6000 ft. elev.; Sierra Nevada Mts. and mts. of S. Calif. (where its elev. range historically was as low as 2000 ft.); extinct in much of range.	Just after snow-melt to August (diurnal)	Fed: END (So. Calif. only) Calif: CSC S2	Absent (no perennial surface water)	None	No
REPTILES						
Clemmys marmorata pallida Southwestern pond turtle	Perennial ponds, streams, irrigation ditches; coastal S and cent. Calif., NW Baja Calif.	Year-around	Fed: none Calif: CSC S2	Absent (no suitable habitat)	None	No
Coleonyx variegatus abbotti San Diego banded gecko	Rock outcrops in shrublands, to 5000 ft. elev.; SW Calif. through much of N Baja Calif.	Spring - summer	Fed: none Calif: S2S3	Moderate - high (potential on slopes & floodplain)	Moderate - high probability of losing occupied habitat and individual animals	No
Anniella pulchra pulchra California silvery legless lizard	Gen. shrublands below about 6000 ft. elev.; Coast Ranges from Bay area to N Baja Calif., SW Sierra Nevada, parts of Cent. Valley, Transverse and Peninsular Ranges	Spring - fall	Fed: none Calif: CSC, S3	Expected	Expected loss of occupied habitat and individual animals	No
Phrynosoma coronatum blainvillei San Diego horned lizard	Forest, shrubland or grassland with sandy areas; W Calif. from LA Co. S through Baja Calif., below ±6000 ft. elev.	Spring - summer	Fed: none Calif: CSC S2S3	High	Likely loss of occupied habitat; possibly individual animals	No

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Cnemidophorus hyperythrus beldingi Belding's orange-throated whiptail	Coastal sage scrub, chaparral; Orange Co., extreme SE LA Co., W Riv. Co., through Baja Calif.	Spring - summer	Fed: none Calif: CSC S2	Absent (outside geographic range)	None	No
Cnemidophorus tigris multiscutatus Coastal western whiptail	Woodlands, shrublands; SW Calif. through much of Baja Calif. , below ±7500 ft. elev.	Spring - summer	Fed: none Calif: S2S3	Occurs	Loss of individual animals and occupied habitat	No
Lichanura trivirgata Rosy boa	Rocky, chaparral-covered hillsides; LA Co. through nw Baja Calif.	Spring - summer	Fed: none Calif: S3S4	Moderate - high (suitable habitat ±throughout)	Moderate-high probability of losing habitat and individual animals	No
Charina bottae umbricata Southern rubber boa	Moist montane forest and woodland; Mt. Pinos, San Bernardino and San Jacinto Mts; usually cool, moist areas w/ deep rocky crevices	Summer	Fed: none Calif:THR S2S3	Absent (no suitable habitat, well below elev. range)	None	No
Diadophis punctatus modestus San Bernardino ringneck snake	Open rocky areas in woodlands, chap-arral and grasslands habitats; W San Diego and Riv. Cos., SW San Bern. Co., Vent. and LA Co., NW Baja Calif.	Spring - summer	Fed: none Calif: S2?	Moderate - high (suitable habitat ±throughout)	Moderate-high probability of losing habitat and individual animals	No
Arizona elegans occidentalis California glossy snake	Gen open shrublands; cismontane Calif. from SF Bay area south thr. N Baja Calif.; very few recent observations	Spring - summer	Fed: none Calif: none local concern	Moderate (suitable habi-tat; local occurrence)	Moderate probability of loss of a few isolated plants	No
Salvadora hexalepis virgultea Coast patch-nosed snake	Shrublands, usually with open sand; Sta. Barb. Co. through SW Calif., to NW Baja Calif.	Spring - summer	Fed: none Calif: CSC S2S3	Moderate - high (suitable habitat ±throughout)	Moderate-high probability of losing habitat and individual animals	No

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Thamnophis hammondii Two-striped garter snake	In or near perennial fresh water and adjacent riparian habitat, usually about pools in streams; SW Calif and NW Baja Calif.	Spring - summer	Fed: none Calif: CSC S2	Absent (no suitable habitat)	None	No
Lampropeltis zonata parvirubra San Bernardino Mountain kingsnake	Forests and shrublands; San Bernardino and San Jacinto Mts endemic (one record in San Gabriels at Lone Pine Cyn: Schoenherr 1976)	Spring - summer	Fed: none Calif: CSC S2?	Low (marginal habitat)	Low probability of indirect disturbance	No
Crotalus ruber ruber Red diamond rattlesnake	Coastal sage scrub, chaparral, desert scrub; SW Calif. (gen. Peninsular Ranges and west), Baja Calif.	Spring - summer	Fed: none Calif: CSC, S2?	Absent (outside geographic range)	None	No
BIRDS						
Elanus leucerus White-tailed kite	Breeds in woodlands and riparian forests, forages over open terrain; Pacific Coast (Calif., N Baja, Oregon), other scattered localities worldwide	Spring - summer	Fed: none Calif: S3 (nesting only)	Nesting: Low Foraging: High (occas.)	None to potential nest sites (unless trees removed); loss or degradation of foraging habitat expected	No
Circus cyaneus Northern harrier	Breeds colonially in grasslands and wetlands; forages over open terrain; N America and Eurasia	Winter; rare in summer	Fed: none Calif: CSC S3 (nesting only)	Nesting: Absent Foraging: High (occas.)	None to nest sites; loss or degradation of foraging habitat expected	No
Haliaeetus leucocephalus Bald eagle	Breed in large trees, usually near major rivers or lakes; winters more widely; wide but scattered distribution in N America; esp. coastal regions	Winter	Fed: THR (prop. for delisting) Calif: S2 END	Absent (except as uncommon flyover)	None	No
Aquila chrysaetos Golden eagle	Nests in remote trees and cliffs; forages over shrublands and grasslands; breeds throughout W N America, winters to E coast	Year-around	Fed: none Calif: CSC S3 (year-around)	Nesting: Absent Foraging: High (occas.)	None to nest sites; loss or degradation of foraging habitat expected	No

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Buteo regalis Ferruginous hawk	Forages over grassland and shrubland; winters in W and SW N Amer. (breeds in Great Basin and N plains)	Winter	Fed: none Calif: CSC S3S4 (wintering)	Nesting: Absent Winter: High (occas.)	None to nest sites; loss or degradation of winter foraging habitat expected	No
Buteo swainsonii Swainson's hawk	Breeds in trees in open habitats (e.g., grassland), Central Valley (Calif.) and W. to cent. US, S. Canada, N. Mexico; winters in S. America. Recorded near Lee Vining in 1985.	Spring - summer	Fed: none Calif: S2, THR	Nesting: Absent Migration: Occurs	None in breeding range; minor disturbance to migratory stopover	No
Accipiter striatus Sharp-shinned hawk	Nests and hunts in forests and woodlands, also forages in open areas; throughout N America, parts of S America	Spring - early summer	Fed: none Calif: CSC S3 (nesting only)	Nesting: Absent Winter: High	None to nest sites; loss or degradation of winter foraging habitat expected	No
Accipiter cooperii Cooper's hawk	Nests and hunts in forests and woodlands occasionally forages in open areas; most of US, Central and S America	Year-around	Fed: none Calif: CSC S3 (nesting only)	Nesting: Low Foraging: High	None to potential nest sites (unless trees removed); loss or degradation of foraging habitat expected	No
Falco columbaris Merlin	Uncommon wintering species in S Calif. desert and valleys (breeds in northern N America and Eurasia)	Winter	Fed: none Calif: CSC S3 (wintering)	Nesting: Absent Winter: High (infreq.)	None to nest sites; loss or degradation of winter foraging habitat expected	No
Falco mexicanus Prairie falcon	Nests on high cliffs, forages primarily over open lands; occurs throughout arid western US and Mexico	Year-around	Fed: none Calif: CSC S3 (nesting only)	Nesting: Absent Foraging: High (infreq.)	None to nest sites; loss or degradation of foraging habitat expected	No
Coccyzus americanus occidentalis Western yellow-billed cuckoo	Nests in dense riparian forest; rare and local in Calif.; subspecies not recognized as distinct by some authors	Summer	Fed: none Calif: END S1	Absent (no suitable habitat, local occur-rences extinct)	None	No

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Speotyto cunicularia (*Athene cunicularia hypugea*) Burrowing owl	Nests in rodent burrows, usually in grasslands; forages in open habitat; increasingly uncommon in S Calif.; occurs through W US and Mexico	Year-around	Fed: none Calif: CSC S2 (burrow sites)	Breeding: Absent (survey) Foraging: Low	None to breeding sites; low probability of degrading or losing foraging habitat	No
Asio otus Long-eared owl	Breeds & roosts in riparian forests & woodlands; forages (at night) over open lands; rare breeding in S Calif.; occurs through N America and Eurasia	Year-around	Fed: none Calif: CSC S3 (nesting only)	Breeding: Absent Foraging: Low	Low probability of degrading or losing foraging habitat	No
Contopus borealis Olive-sided flycatcher	Breeds in forest lands, Calif. and Rocky Mts; higher latitudes of N Amer.; winters in S Amer.	Summer	Fed: none Calif.: S4	Breeding: Absent Migration: Occurs	None to breeding range; minor disturbance to migratory stopover	No
Empidonax traillii extimus Southwestern willow flycatcher	Rare and local is S Calif.; breeds in willow riparian forests; SW US and N Baja	Summer	Fed: **END** Calif: **END** S1	Nesting: Absent Migration: Low	Low probability of minor disturbance to migratory stopover	No
Campytorhynchus bruneicapillus couesi San Diego (coastal population) cactus wren	Coastal sage scrub with cactus patches; S Calif. and NW Baja Calif.	Year-around	Fed: none Calif: CSC S2?	Occurs (floodplain area)	Some loss of foraging area; possible loss of occupied nest sites and individual birds	No
Lanius ludovicianus Loggerhead shrike	Woodlands, shrublands, open areas with scattered perch sites; widespread in N America	Year-around	Fed: none Calif: CSC S4	High	High probability of losing habitat and individual birds	No
Polioptila californica California gnatcatcher	Coastal sage scrub; scattered in Ven and LA Cos; regular in Riv and San Diego Cos. and N Baja Calif; evidently extirpated in San Bern. Mtn. foothills	Year-around	Fed: **THR** Calif: CSC S2	Absent (focused survey results)	None	No

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Vireo bellii ssp. *pusillus* Least Bell's vireo	Riparian forests and willow scrub; breeds in S Calif. and N Baja, winters in Baja; endangered by habitat loss and cowbird parasitism	Spring - summer	Fed: END Calif: END S2	Nesting: Absent Migration: Low	Low probability of minor disturbance to migratory stopover	No
Dendroica petechia Yellow warbler	Breeds in riparian habitat; much of N Amer. but increasingly rare in S Calif. (habitat loss, cowbird parasitism); winters Mex. to S Amer.	Spring - summer	Fed: none Calif: CSC S2 (nesting only)	Nesting: Low Migration: Low	Low probability of minor impact to nesting habitat	No
Icteria virens Yellow-breasted chat	Breeds in dense riparian habitat, low elev., much of US, winters S to Cent. Amer.; becoming rare in Calif. (cowbirds & habitat loss)	Spring - summer	Fed: none Calif: CSC S3 (nesting only)	Nesting: Absent Migration: Low	Low probability of minor disturbance to migratory stopover	No
Ammodramus savannarum Grasshopper sparrow	Breeds in grasslands and similar habitats, mostly E and midwestern US, scattered locns in Calif.; winters near Gulf Coast and Mexico	spring - summer	Fed: none Calif: S2	Nesting: Low Migration: High	Minor disturbance to migratory stopover	No
Spizella atrogularis Black-chinned sparrow	Breeds in shrublands, cent. and S Calif., Ariz, NM, Northern and cent. Mexico; winters in SE Calif., adj Ariz, western Mexico	spring - summer	Fed: none Calif: S3 (nesting)	Occurs (migration or nesting unknown)	Minimal loss of nesting or foraging habitat	No
Spizella passerina Chipping sparrow	Breeds in forests, woodlands, thickets; through most of N America; winters to S; year-around S Calif. & much of Mexico	year-around, Spring-summer (nesting)	Fed: none Calif: S3S4 (nesting only)	Occurs (migration or nesting unknown)	Minimal loss of foraging habitat	No
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	Coastal sage scrub, open chaparral; S Calif. and NW Baja Calif.	Year - around	Fed: none Calif: CSC S2S3	Occurs	Loss of suitable nesting and foraging habitat	No

APPENDIX 1: Special status species of Devore, northern San Bernardino, and San Bernardino Mountain foothills.

Special Status Wildlife	Habitat and Distribution[1]	Activity season[1]	Status Designation[2]	Occurrence Probability[3]	Anticipated impact	CEQA significance criteria
Amphispiza belli belli Bell's sage sparrow	Coastal sage scrub, chaparral, saltbush scrub, cismontane cent. and S Calif., NW Baja Calif.	Year - around	Fed: none Calif: CSC S2? (nesting only)	High	Minimal loss of shrubland habitat	No
Carduelis lawrencei Lawrence's goldfinch	Western Calif. and NW Baja; expands range in winter into Arizona and Sonora (Mexico); breeds in woodlands and shrublands, gen. near water	Year - around	Fed: none Calif: S3 (nesting only)	Occurs	Minimal loss of perching trees	No
MAMMALS						
Lepus californicus bennettii San Diego black-tailed jackrabbit	Most habitat types, esp. shrublands; W Calif. and NW Baja Calif.	Year-around	Fed: none Calif: CSC S3?	Expected	Loss of animals and occupied habitat	No
Chaetodipus fallax fallax (*Perognathus fallax*) San Diego pocket mouse	Open shrublands and sandy areas; SW Calif. and NW Baja Calif.	Year-around (?)	Fed: none Calif: CSC S2S3	Occurs	Loss of occupied habitat and individual animals	No
Perognathus alticola alticola White-eared pocket mouse	Patches of grass or ferns, historically from San Bernardino Mts, though evidently now extinct	Year - around (?)	Fed: none Calif: CSC SH	Absent (well below known elev. range)	None	No
Perognathus longimembris brevinasus Los Angeles pocket mouse	Open shrublands, grasslands; S Calif. valleys, LA, SW San Bernardino and W Riverside Cos.	Year-around (?)	Fed: none Calif: CSC S1?	Occurs	Loss of occupied habitat and individual animals	No (see text)
Dipodomys merriami parvus San Bernardino Merriam's kangaroo rat	Alluvial scrub; interior valleys of S Calif., Cajon Pass and San Gorgonio Pass south to Aguanga	Year-around	Fed: END Calif: CSC S1	Absent (FWS protocol survey results)	None	No
Onychomys torridus ramona Southern grasshopper mouse	Arid cismontane lowlands, LA through San Diego Cos. and NW Baja Calif.	Year-around	Fed: none Calif: CSC S3	Low (not found during SBKR survey)	Low probability of affecting habitat or individual animals	No
Neotoma lepida intermedia San Diego desert woodrat	Chaparral and other shrublands, W Calif., Point Conception south, through NW Baja Calif.	Year-around	Fed: none Calif: CSC S3	Occurs	Loss of occupied habitat and individual animals	No

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Macrotus californicus (*M. waterhousii*) California leaf-nosed bat	Arid lowlands, S Calif., S and W Ariz., Baja Calif. and Sonora, Mexico; roost in mineshafts, forage over open shrub-lands	Year-around	Fed: none Calif: CSC S2S3	Roosting: Absent Foraging: Moderate	Moderate probability of losing or degrading foraging habitat	No
Myotis lucifugus occultus Occult little brown bat (*M. occultus,* Arizona brown bat)	Mostly pine forests, 6000-9000 ft. elev. (also lower elev. riparian habitat); roost in buildings, trees, rocks, etc.; feed over water or open land; hibernates in winter; SE Calif thr AZ & NM	warm season	FWS: none Calif: CSC S2S3	Roosting: Absent Foraging: Moderate	Moderate probability of losing or degrading foraging habitat	No
Eumops perotis californicus California mastiff bat	Lowlands (with rare exceptions); cent. and S Calif., S Ariz., NM, SW Tex., N Mexico; roost in deep rock crevices, forage over wide area	Un-known	Fed: none Calif: CSC S3?	Roosting: Absent Foraging: Unknown	Unknown probability of losing or degrading foraging habitat	No
Nyctinomops macrotis (*Tadarida molossa*) Big free-tailed bat	Rocky cliffs, scattered localities in W N. Amer. through Cent. Amer.	Year-around (?)	Fed: none Calif: CSC S2	Roosting: Absent Foraging: Unknown	Unknown probability of losing or degrading foraging habitat	No
Nyctinomops femorosaccus (*Tadarida femorosaccus*) Pocketed free-tailed bat	Deserts and arid lowlands, SW US, Baja Calif., mainland Mexico; Roost mainly in crevices of high cliffs	Year-around	Fed: none Calif: CSC S2S3	Roosting: Absent Foraging: Unknown	Moderate probability of losing or degrading foraging habitat	No
Taxidea taxus American badger	Mts, deserts, interior valleys where burrowing animals avail as prey and soil permits digging; throughout cent and W N Amer	Year-around	Fed: none Calif: S4	Expected (infrequent)	Loss of habitat	No

[1] **References and notes**

Barbour & Davis 1969 (bats); Calif. Dept. of Fish & Game 2001a, 2001b; California Natural Diversity Data Base 2001;Garrett & Dunn 1981; Grinell and Miller 1943; Hall and Kelson 1959; Hickman 1993; Ingles 1965; Jennings and Hayes 1994; McKernan 1997 (San Bernardino kangaroo rat); Munz 1974; Remsen 1978; Stebbins 1954, 1985; Tibor 2001; US Fish and Wildlife Service 1999; Williams 1976; Zeiner et al. 1988, 1990a, 1990b.

[2] **Status Designations**

Federal designations (US Fish and Wildlife Service). Note that some agencies, but not FWS, continue to use "SOC" as a federal status designation. Until 1996, FWS maintained a list of "category 2 candidates," described as species of concern, but for which insufficient data were available to support listing. This list is no longer maintained and FWS has no "SOC" category.

END: **Federally listed, endangered.**
THR: **Federally listed, threatened.**
PROP: Proposed for the federal status shown.
CAND: Candidate for federal listing; sufficient data are available to support listing, but not yet listed.
None: Not designated.

State designations (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.)
PROP: Proposed for the state status shown.
None: Not designated.

CDFG Natural Diversity Data Base Designations: Applied to special status species and sensitive plant communities; where correct category is uncertain, CDFG 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; clearly lower than S3 but factors exist to cause some concern, i.e., some threat or somewhat narrow habitat. No threat rank.
S5: Demonstrably secure or ineradicable in California. No threat rank.
SH: All California sites are historical (i.e., no known extant occurrences; generally presumed extinct)

California Native Plant Society (CNPS) designations: (Note: According to CNPS (Tibor 2001), 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.)

List 1A: Plants presumed extinct in California.
List lB: 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

1: 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).

[3] **Occurrence Probabilities**

Occurrence probabilities are determined from field surveys and habitat analyses reported here, plus information in the references cited earlier.

Occurs: Observed on the site during this study, or recorded on-site by other qualified biologists.

Expected: Not observed or recorded on the site, but very likely present during at least a portion of the year.

High: Reported sighting(s) in similar habitat in region by qualified biologists, or habitat on the site is a type often utilized by the species and the site is within the known range of the species.

Moderate: Reported sighting(s) in surrounding region, or site is within the known range of the species and habitat on the site is marginally suitable or of a type occasionally used by the species.

Low: Site is within the known range of the species but habitat on the site is rarely used by the species, and there are no reported sighting(s) of the species in the vicinity. It is unlikely that the species exists in substantial numbers if present.

Absent: A focused study failed to detect the species, the site is out of the currently known range, or no suitable habitat is present.

Unknown: No focused surveys have been performed in the region, and the species distribution and habitat are poorly known.

Latin Name	**Common Name**
VASCULAR PLANTS[1]	
ANACARDIACEAE	CASHEW FAMILY
Rhus ovata	Sugarbush
Rhus trilobata	Basketbush
* *Schinus molle*	Peruvian pepper tree
Toxicodendron diversilobum	Poison oak
ASTERACEAE	ASTER FAMILY
Ambrosia psilostachya	Western ragweed
Artemisia californica	California sagebrush
Artemisia dracunculus	Tarragon
Baccharis salicifolia	Mulefat
Brickellia californica	Calif. brickellbush
* *Centaurea melitensis*	Tocalote
* *Cnicus benedictus*	Blessed thistle
Ericameria linearifolia (Haplopappus linearifolius)	Narrowleaf goldenbush
Filago californica	California filago
Gnaphalium californicum	California everlasting
Gutierrezia californica (G. bracteata)	Calif. matchweed
Helianthus annuus	Annual sunflower
Heterotheca grandiflora	Telegraph weed
* *Hypochaeris glabra*	Smooth cat's ear
Lepidospartum squamatum	Scalebroom
Lessingia filaginifolia (Corethrogyne filaginifolia)	Chaparral aster
Lessingia glandulifera	Valley lessingia
Senecio flaccidus (S. douglasii)	Sand-wash butterweed
BORAGINACEAE	BORAGE FAMILY
Amsinckia menziesii var. menziesii	Small flower rancher's fiddleneck
Cryptantha spp.	Unid. popcorn flower (2 or more)
Cryptantha intermedia	Common cryptantha
Pectocarya sp.	Unid. comb-bur
Plagiobothrys canescens (?)	Valley popcornflower
BRASSICACEAE	MUSTARD FAMILY
* *Brassica geniculata (Hirschfeldia incana)*	Short-pod mustard
* *Brassica nigra*	Black mustard
* *Brassica tournefotrii*	Wild turnip
Erysiumum capitatum	Douglas wallflower
Lepidium nitidum (?)	Shining peppergrass
* *Lepicium virginicum var. pubescens*	Wild peppergrass
* *Raphanus sativus*	Wild radish

1. Alien species indicated by asterisk, special status species indicated by two asterisks. This list includes only species observed on the site. Others may have been overlooked or unidentifiable due to season. Plants were identified using keys, descriptions, and illustrations in Abrams (1923-1951), Hickman (1993), and Munz (1974). Taxonomy and nomenclature generally follow Hickman.

CACTACEAE	CACTUS FAMILY
Opuntia littoralis ssp. vaseyi (O. littoralis x phaecantha)	Mesa prickly pear
Opuntia parryi	Valley cholla
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY
Sambucus mexicana	Mexican elderberry
CHENOPODIACEAE	GOOSEFOOT FAMILY
* *Chenopodium album (?)*	Common goosefoot
CRASSULACEAE	STONECROP FAMILY
Crassula connata (C. erecta)	Pygmy weed
CUSCUTACEAE	DODDER FAMILY
Cuscuta subinclusa (C. ceanothi)	Dodder (on Calif. buckwheat)
EUPHORBIACEAE	SPURGE FAMILY
Croton californicus	California croton
Eremocarpus setiger	Doveweed
FABACEAE	PEA FAMILY
Lotus scoparius ssp. brevialutus	Deerweed
Lotus strigosus	Strigose lotus
Lupinus hirsutissimus	Stinging lupine
* *Melilotus officinale*	Yellow sweet clover
GERANIACEAE	GERANIUM FAMILY
* *Erodium botrys*	Long-beak filaree
* *Erodium cicutarium*	Red-stemmed filaree
* *Erodium moschatum*	White-stemmed filaree
HYDROPHYLLACEAE	WATERLEAF FAMILY
Eridictyon trichocalyx	Yerba santa
Phacelia distans	Common phacelia
Phacelia minor	Canterbury bells
Phacelia ramosissima	Branching phacelia
JUGLANDACEAE	WALNUT FAMILY
** *Juglans californica*	So. Calif. black walnut
LAMIACEAE	MINT FAMILY
* *Marrubium vulgare*	Horehound
Salvia apiana	White sage
Salvia mellifera	Black sage
MYRTACEAE	EUCALYPTUS FAMILY
Eucalyptus sp.	Ornamental eucalyptus (windrow on Myers Rd)
OLEACEAE	OLIVE FAMILY
* *Olea europea*	Russian olive (grove on upper alluvial bench)
ONAGRACEAE	EVENING PRIMROSE FAMILY
Camissonia bistorta	Suncup
Camissonia hirtella (?)	Field suncup
PLATANACEAE	SYCAMORE FAMILY
Platanus racemosa	California sycamore
POLYGONACEAE	BUCKWHEAT FAMILY
Eriogonum fasciculatum var. polifolium	California buckwheat
Eriogonum gracile (?)	Slender buckwheat
Pterostegia drymarioides	Hairnet

RHAMNACEAE	BUCKTHORN FAMILY
Ceanothus cuneatus	Wedge-leaf ceanothus
Rhamnus crocea	Spiny redberry
ROSACEAE	ROSE FAMILY
Adenostoma fasciculatum	Chamise
Cercocarpus betuloides	Birch-leaf mountain mahogany
Prunus ilicifolia	Holly-leaved cherry
SALICACEAE	WILLOW FAMILY
Populus fremontii	Fremont cottonwood
Salix exigua	Sandbar willow
SCROPHULARIACEAE	SNAPDRAGON FAMILY
Penstemon spectabilis	Royal penstemon
SOLANACEAE	NIGHTSHADE FAMILY
Datura wrightii (D. meteloides)	Jimsonweed
Solanum xanti	Chaparral nightshade
LILIACEAE	LILY FAMILY
Chlorogalum pomeridianum	Soap plant
Dichelostemma capitata (D. pulchella, Brodiaea pulchella)	Wild hyacinth, bluedicks
Yucca whipplei	Chaparral yucca
POACEAE	GRASS FAMILY
* *Avena barbata*	Wild oat
* *Avena fatua*	Wild oat
* *Bromus diandrus*	Ripgut brome
* *Bromus hordeaceus (B. mollis)*	Soft chess
* *Bromus madritensis ssp. rubens (B. rubens)*	Red brome
* *Bromus tectorum*	Cheat grass
* *Hordeum murinum*	Hare barley
* *Lamarckia aurea*	Goldentop grass
* *Schismus barbatus*	Mediterranean schismus
Stipa coronata (Achnatherum coronatum)	Giant needlegrass
* *Vulpia myuros*	Annual fescue

WILDLIFE[2]

SCIENTIFIC NAME	**COMMON NAME**
REPTILIA	Reptiles
Phrynosomatidae	Phrynosomatids
Sceloporus occidentalis biseriatus	Western fence lizard
Uta stansburiana	Side-blotched lizard
Teiidae	Whiptail lizards
** *Cnemidophorus tigris*	Western whiptail

2. The following is a list of species observed or detected on the project site. Non-native species are indicated by an asterisk. Species on CDFG's Special Animals list are indicated by two asterisks. Other species may have been overlooked or inactive/absent because of the season (amphibians are active during rains, reptiles during summer, some birds (and bats) migrate out of the area for summer or winter, some mammals hibernate etc.). Taxonomy and nomenclature generally follow Fisher and Case (1997) for amphibians and reptiles, AOU (1998) for birds, and Jones et al. (1992) for mammals.

Colubridae	Colubrids
Masticophus flagellum	Coachwhip
AVES	Birds
Accipitridae	Raptors
** *Buteo swainsoni*	Swainson's hawk
Buteo jamaicensis	Red-tailed hawk
Falconidae	Falcons
Falco sparverius	American kestrel
Odontophoridae	Quail
Callipepla californica	California quail
Columbidae	Pidgeons and doves
Zenaida macroura	Mourning dove
Trochilidae	Hummingbirds
Archilochus alexandri	Black-chinned hummingbird
Calypte anna	Anna's hummingbird
Calypte costae	Costa's hummingbird
Picidae	Woodpeckers
Picoides nuttallii	Nuttall's woodpecker
Tyrannidae	Tyrant flycatchers
** *Contopus cooperi*	Olive-sided flycatcher
Contopus sordidulus	Western wood-pewee
Empidonax sp.	Flycatcher
Sayornis nigricans	Black phoebe
Myiarchus cinerascens	Ash-throated flycatcher
Tyrannus vociferans	Cassin's kingbird
Vireonidae	Vireos
Vireo gilvus	Warbling vireo
Corvidae	Jays and crows
Aphelocoma californica	Western scrub-jay
Corvus brachyrhynchos	American crow
Corvus corax	Common raven
Hirundinidae	Swallows
Tachycineta thalassina	Violet-green swallow
Aegithalidae	Bushtits
Psaltriparus minimus	Bushtit
Troglodytidae	Wrens
** *Campylorhynchus brunneicapillus*	Cactus wren
Thryomanes bewickii	Bewick's wren
Troglodytes aedon	House wren
Turdidae	Bluebirds and thrushes
Sialia mexicana	Western bluebird
Timaliidae	Wrentits
Chamaea fasciata	Wrentit
Mimidae	Mockingbirds and thrashers
Toxostoma redivivum	California thrasher
Sturnidae	Starlings
* *Sturnus vulgaris*	European starling
Ptilogonatidae	Silky flycatchers
Phainopepla nitens	Phainopepla

Parulidae	Wood warblers
Vermivora celata	Orange-crowned warbler
Dendroica coronata	Yellow-rumped warbler
Dendroica townsendi	Townsend's warbler
Thraupidae	Tanagers
Piranga ludoviciana	Western tanager
Emberizidae	Towhees and sparrows
Pipilo maculatus	Spotted towhee
Piplio crissalis	California towhee
** *Aimophila ruficeps*	Rufous-crowned sparrow
** *Spizella passerina*	Chipping sparrow
** *Spizella atrogularis*	Black-chinned sparrow
Chondestes grammacus	Lark sparrow
Melospiza melodia	Song sparrow
Melospiza lincolnii	Lincoln's sparrow
Zonotrichia leucophrys	White-crowned sparrow
Zonotrichia atricapilla	Golden-crowned sparrow
Cardinalidae	Grosbeaks and buntings
Pheucticus melanocephalus	Black-headed grosbeak
Passerina amoena	Lazuli bunting
Icteridae	Blackbirds and orioles
* *Molothrus ater*	Brown-headed cowbird
Icterus bullockii	Bullock's oriole
Fringillidae	Finches
Carpodacus mexicanus	House finch
Carduelis psaltria	Lesser goldfinch
** *Carduelis lawrencei*	Lawrence's goldfinch
Carduelis tristis	American goldfinch
MAMMALIA	Mammals
Leporidae	Hares and rabbits
Sylvilagus audubonii	Desert cottontail
Sciuridae	Squirrels
Spermophilus beecheyi	California ground squirrel
Geomyidae	Pocket gophers
Thomomys bottae	Botta's pocket gopher (burrows)
Heteromyidae	Pocket mice, kangaroo rats
** *Perognathus longimembris brevinasus*	Los Angeles pocket mouse
Chaetodipus fallax	San Diego pocket mouse
Dipodomys simulans	Dulzura kangaroo rat
Muridae	Old world rats and mice
Reithrodontomys megalotis	Western harvest mouse
Peromyscus californicus	California mouse
Peromyscus maniculatus	Deer mouse
** *Neotoma lepida intermedia*	San Diego desert woodrat
Microtus californicus	California vole
Canidae	Dogs/wolves/foxes
* *Canis familiarus*	Domestic dog
Canis latrans	Coyote (scat, tracks)
Equidea	Horses and allies
* *Equus caballus*	Domestic horse
Cervidae	Deer
Odocoileus hemionus	Mule deer