4.2 BIOLOGICAL RESOURCES

INTRODUCTION

The proposed project would result in the permanent conversion of, or temporary disturbance to, 13.0 acres of California annual grasslands, 0.7 acre of foothill needlegrass grassland, 10.4 acres of California sagebrush scrub, 10.2 acres of California buckwheat scrub, 33.1 acres of chamise chaparral, 23.9 acres of hoaryleaf ceanothus chaparral, 1.9 acres of riparian communities, 0.19 acre of vernal pool habitat, 0.05 acre of hillside seep habitat, and 7.3 acres of disturbed areas.

Significant impacts would result with respect to the loss of foothill needlegrass grassland, riparian communities, vernal pool habitat, and hillside seep habitat; the loss of habitat for common and special-status wildlife species, including riparian-dependent and vernal-pool dependent species; potential construction-related loss of nests of common and special-status bird species; the loss of California Native Plant Society (CNPS) List 1B, and federally Threatened special status plant species; the loss of protected oak trees; the potential loss of federally Threatened and Endangered fairy shrimp species, and additional non-listed special-status animal species; the loss of 0.51 acre of California Department of Fish and Game (CDFG) and 0.85 acre of US Army Corps of Engineers (USACE) jurisdictional areas; and indirect impacts including increased lighting and glare, increased landscaping irrigation and stormwater runoff, an increase in non-native plant and wildlife species, increased human activity and domestic animal presence, and increased erosion and dust resulting from construction and grading activities.

Implementation of mitigation measures required by this EIR would mitigate some, but not all, of the identified project-specific impacts to less than significant levels. Significant unavoidable impacts would occur due to the loss of vernal pool habitat and vernal pool-dependent species. The project would also contribute to a significant unavoidable cumulative impact related to the ongoing loss of biological resources in the project region.

PROJECT DESCRIPTION

The proposed project involves the construction of a new roadway segment between Golden Valley Road and the existing western roadway terminus near Sheldon Avenue. The Via Princessa East Extension would be one of the primary east-west arterials through the City of Santa Clarita. The proposed roadway would be approximately 1.2 miles in length and would be designated as a Major Arterial Highway per the City of Santa Clarita's Master Plan of Arterial Highways. The proposed roadway would consist of a six-lane facility with a 14-foot raised landscaped median, a 10-foot sidewalk on each side, and a 16-foot two-lane bike path along the south side. The vehicle lanes adjacent to the median would be 12 feet wide,

the middle lanes would be 11 feet wide, and the right lanes would be 12 feet wide. The typical right-of-way width would be 116 feet.

The portion of Via Princessa between Sheldon Avenue and Rainbow Glen Drive that is currently constructed as a half section would be completed by constructing the south side of the roadway. In this section, the roadway would be constructed to a typical right-of-way width of 104 feet, consistent with the original design for this section. The total project area, including remedial grading acreage is 25.2 acres.

GENERAL PROJECT SITE CHARACTERISTICS

The Via Princessa Road Extension (project) site is situated on the Mint Canyon 7.5-minute US Geological Survey (USGS) quadrangle map, and is located in the City of Santa Clarita in northwestern Los Angeles County, approximately 28 miles northwest of downtown Los Angeles (**Figures 3.0-1** and **3.0-2**). The project site is largely undeveloped except for unpaved access roads and a Southern California Edison (SCE) power line easement. Slopes range from relatively level on mesa tops to very steep along canyon sides and drainages. The site drains generally northwest towards the Santa Clara River, which lies approximately 1.5 miles to the north. The central portion of the site is dominated by a mesa that supports a vernal pool. Elevations on the site range from approximately 1,430 feet above sea level in the northwest, where drainages exit the site, to 1,690 feet in the northeast.

METHODS

Literature/Database Review

To evaluate the natural resources found or potentially occurring on the project site, the current versions of the California Natural Diversity Data Base (CNDDB) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants were reviewed for the USGS 7.5-minute quadrangle on which the project site is located (Mint Canyon) and the eight surrounding quadrangles (Green Valley, Sleepy Valley, Newhall, Oat Mountain, Warm Springs Mountain, Agua Dulce, San Fernando, and Sunland). A list of potentially occurring special-status species was generated (**Tables 4.2-2** and **4.2-3**) for use in field surveys and impact assessment.

Field Surveys

All field surveys were conducted by biologists qualified or permitted to conduct such surveys. All surveys were conducted in accordance with established resource agency survey protocols, as applicable, or consistent with accepted survey methodologies for particular species if published protocols did not exist. A summary of surveys dates, surveyors, and methodologies is provided in **Table 4.2-1, Biological**

Surveys Conducted on the Via Princessa Road Alignment Site. The survey reports referenced in **Table 4.2-1** are included in **Appendix 4.2**.

Table 4.2-1
Biological Surveys Conducted on the Via Princessa Road Alignment Site

Taxonomic group/technical report	Consultant (and permit number if applicable)	Survey dates	General methods
Plant surveys and general biological surveys	Impact Sciences	April, May, and June 2010	Focused plant surveys were conducted throughout the site, excluding the SCE easement on April 6 and 20; within the vernal pool on May 18; and within the SCE easement on June 11. The surveys were floristic in nature and were conducted according to accepted scientific protocol. Vegetation types and plant species associations were also noted and their dominant species recorded at this time.
Jurisdictional delineation of waters and streambeds	Impact Sciences	April 2010	The on-site drainage system was delineated for jurisdictional resources; published USACE/CDFG delineation protocols were utilized in the field.
Fairy shrimp	Thomas Juhasz (TE-20890-0)	Ongoing; commenced May 2010	Wet and dry season vernal pools surveys were conducted in the on-site vernal pool.
Coastal California gnatcatcher	Cooper Ecological Monitoring (TE-100008-1)	July–November 2010	A series of nine survey visits were conducted per US Fish and Wildlife Service (USFWS) protocol for California gnatcatcher.

BIOLOGICAL RESOURCES

Vegetation

On-site vegetation types are shown on **Figure 4.2-1, Vegetation Map**. Vegetation types present on site include grassland, coastal scrub, chaparral, riparian, vernal pool, and disturbed types. The field surveys were conducted on a project area of greatest potential impact from combined roadway and corrective grading.

Grasslands

Grassland communities on site include annual and perennial types. California annual grasslands (42.040.00) comprise a complex mosaic of herbaceous stands including upland mustards, annual brome grasslands, and yellow star-thistle fields. None of these annual types is provided a sensitivity ranking of G3 or higher ranking by CDFG,[1] and due to their low conservation status and complex arrangement, they

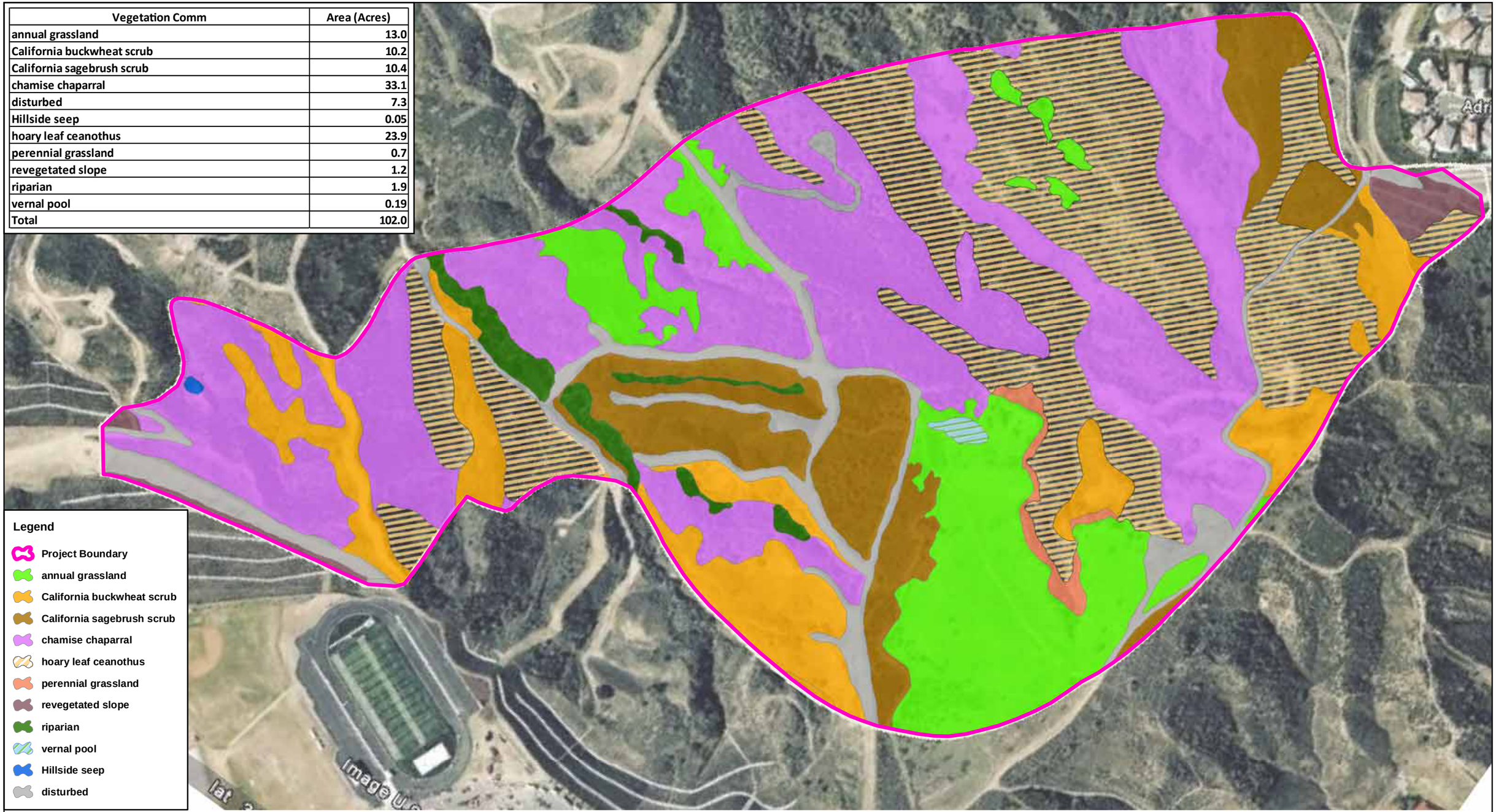
1 CDFG. 2009. Biogeographic Data Branch, Vegetation Classification and Mapping Program, List of California Vegetation Alliances.

are in this document mapped collectively as "annual grassland" in **Figure 4.2-1**. Annual grasslands occur on open, relatively level to slightly sloping and accessible locations throughout the site, such as on ridges and plateaus. Annual grassland communities are principally dominated by non-native annual species including oat and brome grasses (*Avena* and *Bromus* species), tocolote (*Centaurea melitensis*), summer mustard (*Hirschfeldia incana*), and red-stem filaree (*Erodium cicutarium*), with localized high-densities of ruderal native annuals such as fascicled tarplant (*Deinandra fasciculata*) and rancher's fireweed (*Amsinckia menziesii* var. *intermedia*).

Stands of perennial grasses are largely confined to openings within communities more properly mapped as coastal scrub or chaparral formations. However, in a few instances, these stands are large enough to be mapped as distinct vegetation types. These stands occur on open slopes, usually with a northern aspect, and are dominated by native perennial grasses, including needlegrasses (*Nassella* species), one-sided bluegrass (*Poa secunda* ssp. *secunda*), and Coast Range melic (*Melica imperfecta*). These stands are mapped as foothill needlegrass grassland (41.110.00) in **Figure 4.2-1**.

Within both annual and perennial grasslands, subdominant and emergent herbaceous species may include common lomatium (*Lomatium utriculatum*), annual bur-sage (*Ambrosia acanthicarpa*), California thistle (*Cirsium occidentale* var. *californicum*), California aster (*Corethrogyne filaginifolia*), coast goldfields (*Lasthenia californica*), California cottonrose (*Logfia filaginoides*), Douglas's silverpuffs (*Microseris douglasii* ssp. *douglasii*), common sow thistle (*Sonchus oleraceus*), everlasting nest-straw (*Stylocline gnaphaloides*), silverpuffs (*Uropappus lindleyi*), slender combseed (*Pectocarya linearis* ssp. *ferocula*), valley popcorn-flower (*Plagiobothrys canescens*), Peirson's morning-glory (*Calystegia peirsonii*), turkey mullein (*Croton setigerus*), coastal bird's-foot trefoil (*Lotus salsuginosus*), deerweed (*Lotus scoparius* var. *scoparius*), miniature lupine (*Lupinus bicolor*), burclover (*Medicago polymorpha*), yellow sweet-clover (*Melilotus indicus*), winecup clarkia (*Clarkia purpurea* ssp. *quadrivulnera*), purple owl's-clover (*Castilleja exserta* ssp. *exserta*), wavy-leaf soap plant (*Chlorogalum pomeridianum* var. *pomeridianum*), blue-eyed-grass (*Sisyrinchium bellum*), slender mariposa lily (*Calochortus clavatus* var. *gracilis*), splendid mariposa lily (*C. splendens*), butterfly mariposa lily (*C. venustus*), common goldenstar (*Bloomeria crocea*), and bluedicks (*Dichelostemma capitatum*).

Vegetation Comm	Area (Acres)
annual grassland	13.0
California buckwheat scrub	10.2
California sagebrush scrub	10.4
chamise chaparral	33.1
disturbed	7.3
Hillside seep	0.05
hoary leaf ceanothus	23.9
perennial grassland	0.7
revegetated slope	1.2
riparian	1.9
vernal pool	0.19
Total	102.0



SOURCE: Image - Google Earth 2009
Impact Sciences, Inc. - September 2010

FIGURE **4.2-1**

Vegetation Map

112-028•03/11

Scrub formations

Scrub communities are found primarily on drier, south-facing slopes and ridgetops. These are mostly dominated by California sagebrush (*Artemisia californica*), or California buckwheat (*Eriogonum fasciculatum*), depending on underlying soil type, water availability, and disturbance history. These formations may be relatively open, allowing for a diverse complement of emergent, and understory species, such as blue elderberry, scapellote (*Acourtia microcephala*), annual bur-sage, big sagebrush (*Artemisia tridentata* ssp. *tridentata*), California thistle, California aster, pine-leaf goldenbush (*Ericameria pinifolia*), golden yarrow (*Eriophyllum confertiflorum* var. *confertiflorum*), slender sunflower (*Helianthus gracilentus*), spineless horsebrush (*Tetradymia canescens*), thick-leaved yerba santa (*Eriodictyon crassifolium*), beavertail cactus (*Opuntia basilaris* var. *basilaris*), deerweed, bishop's lotus (*Lotus strigosus*), chia sage (*Salvia columbariae* var. *columbariae*), purple sage (*Salvia leucophylla*), black sage (*Salvia mellifera*), California wishbone bush (*Mirabilis laevis* var. *crassifolia*), California suncups (*Camissonia californica*), Turkish rugging (*Chorizanthe staticoides*), wavy-leaf soap plant, Whipple's yucca (*Yucca whipplei*), giant wildrye (*Leymus condensatus*), Coast Range melic, foothill needlegrass (*Nassella lepida*), purple needlegrass (*Nassella pulchra*), one-sided bluegrass, common goldenstar, and bluedicks.

Scrub communities on site are mapped on **Figure 4.2-1** as California sagebrush scrub (32.010.00) and California buckwheat scrub (32.040.00).

Chaparral formations

Chaparral communities are the typical shrubland formations on north facing slopes, and are dominated primarily by hoaryleaf ceanothus (*Ceanothus crassifolius*), buckbrush (*C. cuneatus*), and chamise (*Adenostoma fasciculatum*). Additional species in the shrub canopy of chaparral communities include blue elderberry (*Sambucus nigra* ssp. *caerulea*), chaparral currant (*Ribes malvaceum*), pink-flowered bushmallow (*Malacothamnus marrubioides*), redberry (*Rhamnus crocea*), mountain mahogany (*Cercocarpus betuloides* var. *betuloides*), toyon (*Heteromeles arbutifolia*), and hollyleaf cherry (*Prunus ilicifolia* ssp. *ilicifolia*).

Chaparrals on site are mapped on **Figure 4.2-1** as chamise chaparral (37.101.00) and hoaryleaf ceanothus chaparral (37.208.00).

Riparian communities

Along drainages and swales, where higher soil moisture allows the growth of plant species not commonly seen elsewhere on site, distinct vegetation types have been delineated. These are not extensive and are not supported by relatively permanent sources of surface water. Nevertheless, they represent vegetation types that are characteristic of headwater channels and coast live oak (*Quercus agrifolia* var.

agrifolia), Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), and arroyo willow (*Salix lasiolepis*) may achieve localized dominance along these features, especially in lower portions of the site. Elsewhere, vegetation type within drainages and swales areas is differentiated from that of upland areas by a greater cover of an assortment of species requiring higher moisture availability, including blue elderberry, skunk bush (*Rhus aromatica*), poison-oak (*Toxicodendron diversilobum*), mulefat (*Baccharis salicifolia*), golden currant (*Ribes aureum*), and giant wildrye (*Leymus condensatus*).

Because of the diversity and patchy distribution of dominant species within these communities, they have not been assigned an alliance name corresponding to the List of California Vegetation Alliances, but are instead mapped as "riparian" on **Figure 4.2-1**.

Vernal pool

A southern vernal pool (44.300.00) is present on site within a landslide depression surrounded by undulating terrain. Vegetation within the pool and along its banks is markedly distinct from the surrounding vegetation type and includes clustered tarplant, western marsh cudweed (*Gnaphalium palustre*), dwarf wooly-heads (*Psilocarphus brevissimus* var. *brevissimus*), vernal pool boisduvalia (*Epilobium pygmaeum*), Moran's nosegay (*Navarretia fossalis*), longstem spikerush (*Eleocharis macrostachya*), western toad rush (*Juncus bufonius* var. *occidentalis*), and annual hairgrass (*Deschampsia danthonioides*).

Hillside seep

A small area (approximately 0.05 acre) in the southwestern portion of the site supports hydrophytic vegetation surrounding a seep (45.000.00). Vegetation here is dominated by Mexican wire rush (*Juncus mexicanus*).

Disturbed areas

Disturbed areas are primarily associated with dirt roads and trails. These support native and non-native annual and short-lived perennial species, including annual bur-sage, tocolote, California aster, telegraph weed (*Heterotheca grandiflora*), summer mustard, eastern rocket (*Sisymbrium orientale*), rattlesnake weed (*Chamaesyce albomarginata*), castor-bean (*Ricinus communis*), Santa Barbara milkvetch (*Astragalus trichopodus*), deerweed, bishop's lotus, stinging lupine (*Lupinus hirsutissimus*), blunt-leaved lupine (*L. truncatus*), burclover, yellow sweet-clover, red-stem filaree, chia sage, California buckwheat, tree tobacco (*Nicotiana glauca*), slender oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft chess (*B. hordeaceus*), red brome (*B. madritensis* ssp. *rubens*), Arabian splitgrass (*Schismus arabicus*), and mouse-tail fescue (*Vulpia myuros*).

Peirson's morning-glory, Moran's nosegay, and slender mariposa lily are special-status plant species; these and other potentially occurring special-status plant species are discussed in greater detail in **Sensitive Biological Resources**, below.

Wildlife

This section discusses common wildlife species observed or potentially occurring on the Via Princessa Road Alignment project site. Special-status wildlife species observed or potentially occurring on the project site are discussed in greater detail in **Sensitive Biological Resources**, below.

Amphibians

On-site drainages and the vernal pool provide habitat for amphibians. Pacific chorus frog (*Pseudacris regilla*) was heard in drainages, and tadpoles and metamorphs of western spadefoot (*Spea hammondii*) were observed in association with the vernal pool.

Reptiles

Reptile species observed on the project site include San Diego alligator lizard (*Elgaria multicarinata webbii*), Great Basin fence lizard (*Sceloporus occidentalis longipes*), California side-blotched lizard (*Uta stansburiana elegans*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), San Diego gopher snake (*Pituophis catenifer annectens*), and southern Pacific rattlesnake (*Crotalus helleri*). Common reptile species are expected to be abundant throughout the project site.

Birds

Species observed during most of the nine gnatcatcher survey visits and that may be presumed to utilize the site and adjacent off-site areas as resident, breeding, or over-wintering species include California quail (*Callipepla californica*), Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Costa's hummingbird (*Calypte costae*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), Cassin's kingbird (*Tyrannus vociferans*), western scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), Bewick's wren (*Thryomanes bewickii*), wrentit (*Chamaea fasciata*), California thrasher (*Toxostoma redivivum*), California towhee (*Pipilo crissalis*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis psaltria*). Although observed only twice during surveys, greater roadrunner (*Geococcyx californianus*) is also presumed to be resident on the site, as it is a non-migratory species.

Additional species observed a small number of times and presumed to utilize the site rarely or during migration include turkey vulture (*Cathartes aura*), osprey (*Pandion haliaetus*), sharp-shinned hawk

(*Accipiter striatus*), merlin (*Falco columbarius*), peregrine falcon (*Falco peregrinus*), rock pigeon (*Columba livia*), Vaux's swift (*Chaetura vauxi*), Allen's hummingbird (*Selasphorus sasin*), Nuttall's woodpecker (*Picoides nuttallii*), northern flicker (*Colaptes auratus*), ash-throated flycatcher (*Myiarchus cinerascens*), western kingbird (*Tyrannus verticalis*), loggerhead shrike (*Lanius ludovicianus*), cliff swallow (*Petrochelidon pyrrhonota*), bushtit (*Psaltriparus minimus*), house wren (*Troglodytes aedon*), ruby-crowned kinglet (*Regulus calendula*), blue-gray gnatcatcher (*Polioptila caerulea*), western bluebird (*Sialia mexicana*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), American pipit (*Anthus rubescens*), yellow-rumped warbler (*Dendroica coronata*), spotted towhee (*Pipilo maculatus*), chipping sparrow (*Spizella passerina*), vesper sparrow (*Pooecetes gramineus*), savannah sparrow (*Passerculus sandwichensis*), fox sparrow (*Passerella iliaca*), Lincoln's sparrow (*Melospiza lincolnii*), white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Zonotrichia atricapilla*), dark-eyed junco (*Junco hyemalis*), black-headed grosbeak (*Pheucticus melanocephalus*), western meadowlark (*Sturnella neglecta*), Lawrence's goldfinch (*Carduelis lawrencei*), and American goldfinch (*Carduelis tristis*).

Of the bird species observed on site, Cooper's hawk, Vaux's swift, and loggerhead shrike are included on the CDFG List of Special Animals. An additional three species have recently been identified as Los Angeles County Bird Species of Special Concern[2] due to declining and vulnerable populations in the County: greater roadrunner, vesper sparrow, and western meadowlark. These are discussed in greater detail in **Sensitive Biological Resources**, below.

Mammals

Mammal species observed on the project site, either directly or through sign such as scat, tracks, or burrows include mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), desert cottontail (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), dusky-footed woodrat (*Neotoma fuscipes*), and California ground squirrel (*Spermophilus beecheyi*). Several common burrowing rodent species are also expected based on the presence of suitable habitat and burrows. These include California pocket mouse (*Chaetodipus californicus*), agile kangaroo rat (*Dipodomys agilis*), California vole (*Microtus californicus*), California mouse (*Peromyscus californicus*), and deermouse (*Peromyscus maniculatus*).

2 Allen, LR *et al*. 2009. Los Angeles County's Sensitive Bird Species. *Western Tanager* 75(3). January/February 2009.

Wildlife Habitat Linkages

Wildlife corridors are described as pathways or habitat linkages that connect discrete areas of natural open space that are otherwise separated or fragmented by topography, changes in vegetation type, and other natural or human induced factors such as urbanization. The fragmentation of natural habitat creates isolated "islands" of vegetation type that may not provide sufficient area or resources to accommodate sustainable populations for a number of species. These corridors

- allow animals to move between remaining habitats to replenish depleted populations and increase the available gene pool;
- provide escape routes from fire, predators and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) will result in population or species extinction; and
- serve as travel paths for individual animals moving throughout their home range in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

South Coast Missing Linkages is an inter-agency effort to identify and conserve the highest priority linkages in the South Coast Ecoregion. Partners in the effort include South Coast Wildlands, National Park Service, US Forest Service, California State Parks, The Wildlands Conservancy, The Resources Agency, California State Parks Foundation, The Nature Conservancy, Santa Monica Mountains Conservancy, Resources Legacy Foundation, Conservation Biology Institute, San Diego State University Field Stations Program, Environment Now, Mountain Lion Foundation, and the Zoological Society of San Diego's Conservation and Research for Endangered Species, among others. The South Coast Missing Linkages project has developed a comprehensive plan for a regional network that would maintain and restore critical habitat linkages between existing open space reserves. The project site does not lie within any of the regionally designated linkages identified by South Coast Missing Linkages, the nearest of which is the San Gabriel – Castaic Connection, which lies approximately 5 miles to the east of the project site.

Although not identified within the San Gabriel – Castaic Linkage, a local corridor is present adjacent to the project site, connecting Placerita Canyon to the Santa Clara River through relatively undeveloped, albeit disturbed, habitat areas west of Golden Valley Road. Disturbances within the corridor are the results of previous oil extraction and aerospace research activities within Quigley Canyon and the Whitaker-Bermite property, respectively. This "Quigley-Whitaker-Bermite corridor" provides habitat for most of the common animal species to be found within the Santa Clarita Valley. Medium to large-bodied animal species, such as mule deer, coyote, and bobcat are likely to cross Golden Valley Road in order move into and out of the project site from areas within the Quigley-Whitaker-Bermite corridor from time to time. However, because of its "cul-de-sac" configuration with respect to the Quigley-Whitaker-Bermite

corridor, the project site itself does not provide through-movement opportunity, and is not expected to comprise an important part of any regional movement corridor.

SENSITIVE BIOLOGICAL RESOURCES

The following discussion focuses on those species and plant communities considered by state or federal resource agencies, and by recognized conservation organizations, to be of special-status, that are known to occur, or could potentially occur on the project site. A list of all plant and wildlife species, both common and special-status, observed on the project site is found in **Appendix 4.2**.

Special-Status Plants

Special-status plants include those species that are state or federally listed as Rare, Threatened, or Endangered; federal Candidates for listing; proposed for state or federal listing; or included on Lists 1, 2, 3, or 4 of the CNPS Inventory of Rare and Endangered Plants of California (CNPS Inventory). Plants included on the CNPS Inventory are classified as follows:

- List 1A: plants presumed extinct in California
- List 1B: plants Rare, Threatened, or Endangered in California and elsewhere
- List 2: plants Rare, Threatened, or Endangered in California, but more common elsewhere
- List 3: plants about which more information is needed—a review list
- List 4: plants of limited distribution—a watch list.

Based on a review of the CNDDB and CNPS databases and the results of surveys conducted on the Via Princessa Road Alignment project site, a total of 23 special-status plant species were identified as occurring in the region[3].

Special-status plant species that were observed on the project site during focused surveys include Peirson's morning-glory (*Calystegia peirsonii*), Moran's nosegay (*Navarretia fossalis*), and slender mariposa lily (*Calochortus clavatus* var. *gracilis*).

[3] For the purposes of this analysis, the project region is considred to be the nine-quad region containing the project site—USGS quads Mint Canyon, Green Valley, Sleepy Valley, Newhall, Oat Mountain, Warm Springs Mountain, Agua Dulce, San Fernando, and Sunland.

Peirson's morning-glory is a CNPS List 4.2 plant, typically found in chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, and grasslands. It is relatively common in annual grasslands on site; however, due to the low sensitivity status of the species, observations were not mapped.

Moran's nosegay is a federally listed Threatened and CNPS List 1B.1 species, reported from chenopod scrub, freshwater marshes and swamps, playas, and vernal pools. This species is relatively common within the on-site vernal pool, and occurs nowhere else on the project site. Within Los Angeles County, the only other extant populations of this species are known from the Cruzan Mesa vernal pool complex, approximately 4 miles northeast of the project site.[4]

Slender mariposa lily is a CNPS List 1B.2 plant, typically found in chaparral, coastal sage scrub, and grasslands, often on clay or rocky soils. A population of this species is present within the foothill needlegrass grassland mapped on north-facing slopes, north of the vernal pool. In 2010, the on-site population comprised approximately 30 flowering individuals.

The special-status plant species identified in **Table 4.2-2, Special-Status Plant Species Documented in the Project Area but not Observed on the Project Site**, are known to occur in the project region and were target species of the focused plant surveys conducted on, and in the vicinity of, the Via Princessa project site. None of these species were observed on the project site. Although not detected during surveys conducted in spring 2010, the potential of some of these species to occur on the site in future seasons cannot be entirely ruled out.

4 Consortium of California Herbaria. 2010. Accession Results for *Navarretia fossalis*. Available at ucjeps.berkeley.edu/consortium

Table 4.2-2
Special-Status Plant Species Documented in the Project Area but not Observed on the Project Site

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to Occur on Site
Dicots						
Braunton's milk-vetch *Astragalus brauntonii*	FE	—	1B.1	Usually on recent burns or disturbed communities in sandstone soils with carbonate layers in closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland communities between 4 and 640 m mean sea level (msl).	Perennial herb January–August	**None**—carbonate soils are not present on the project site.
Nevin's barberry *Berberis nevinii*	FE	SE	1B.1	Sandy or gravelly habitats on steep north-facing slopes and in low-grade washes in chaparral, cismontane woodland, and coastal and riparian scrub communities between 274 and 825 m msl.	Perennial evergreen shrub March–June	**None**—the project site is outside of the species natural range. The nearest reported population, for which this species is included in the CNDDB query results (in San Francisquito Canyon) is introduced. Nearest known natural populations are south of the San Gabriel Mountains, in San Fernando Valley. If present, this perennial species would be conspicuous, and a lack of observation is considered evidence that it is not present on site.
Round-leaved filaree *California macrophylla* [Treated as *Erodium macrophyllum* in *The Jepson Manual*.]	—	—	1B.1	Clay soils in cismontane woodland, valley and foothill grassland communities between 15 and 1200 m msl.	Annual herb March–May	**Low**—clay soils are generally lacking; however, the presence of vernal pools on site indicates the potential for heavy soils characteristics that may be favored by this species.
Southern tarplant *Centromadia parryi* ssp. *australis*	—	—	1B.1	Vernally mesic, often alkaline, habitats in marshes and swamp margins, valley and foothill grassland, and vernal pool communities between 0 and 427 m msl.	Annual herb May–November	**Low**—the vernal pool on site may provide suitable habitat; however, the site is outside the known range of the species. Repeated visits to the vernal pool in spring 2010 did not result in the detection of this species on site.
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	FC	SE	1B.1	Sandy soils in coastal scrub and valley and foothill grassland communities between 150 and 1220 m msl.	Annual herb April–July	**Low**—appropriate habitat for this species is present along ridge tops and slopes on the project site. Appropriately timed surveys in 2010 did not result in the detection of this species on site.

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to Occur on Site
Dicots (continued)						
Parry's spineflower *Chorizanthe parryi* var. *parryi*	—	—	1B.1	Sandy or rocky habitats and openings in chaparral, cismontane woodland, coastal scrub, valley, and foothill grassland communities between 275 and 1220 m msl.	Annual herb April–June	**Low**—appropriate habitat for this species is present along ridge tops and slopes on the project site. Appropriately timed surveys in 2010 did not result in the detection of this species on site.
White-bracted spineflower *Chorizanthe xanti* var. *leucotheca*	—	—	1B.2	Sandy or gravelly substrates in Mojave Desert scrub and pinyon juniper woodland communities between 300 and 1200 m msl.	Annual herb April–June	**None**—the site is outside the known range of this species.
Santa Susana tarplant *Deinandra minthornii* [State listed as *Hemizonia minthornii*; see this name in *The Jepson Manual*.]	—	Rare	1B.2	Sandstone outcrops and crevices in chaparral and coastal scrub communities between 280 and 760 m msl.	Perennial deciduous shrub July–November	**None**—sandstone outcrops are not present on the project site.
Slender-horned spineflower *Dodecahema leptoceras*	FE	SE	1B.1	Sandy soils in flood-deposited terraces and washes in alluvial scrub communities between 200 and 760 m msl	Annual herb April–June	**None**—flood terrace habitat is not present on the project site.
San Gabriel bedstraw *Galium grande*	—	—	1B.2	Open chaparral and low, open oak forest; on rocky slopes between 425 and 1500 m msl.	Perennial deciduous shrub January–July	**None**—the project site is outside the geographic range of this species, which lies south of the project within the San Gabriel Mountains.
Palmer's grapplinghook *Harpagonella palmeri*	—	—	4.2	Clay soils in chaparral, coastal scrub, and valley and foothill grassland communities between 20 and 955 m msl.	Annual herb March–May	**Low**—thorough surveys of suitable habitat areas on site did not result in the detection of this species during Spring 2010. Nevertheless, because of the presence of vernal pools on the project site, and the attendant heavy soils in around the pool, some potential exists for the species' occurrence.
Newhall sunflower *Helianthus inexpectatus*	—	—	1B.1	Freshwater marshes, swamps, riparian woodland, and seeps; 305 m msl.	Perennial rhizomatous herb August–October	**None**—appropriate mesic habitats are limited to small areas on site and did not support any individuals matching this species' description. If present, this species would be conspicuous, and a lack of observation is considered evidence that it is not present on site.

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to Occur on Site
Dicots (continued)						
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	—	—	1A	Presumed extinct. Coastal, salt, and freshwater marshes and swamps between 5 and 1675 m msl.	Perennial rhizomatous herb August–October	**None**—appropriate mesic habitats are limited to small areas on site and did not support any individuals matching this species' description. If present, this species would be conspicuous, and a lack of observation is considered evidence that it is not present on site.
Ross's pitcher sage *Lepechinia rossii*	—	—	1B.2	Soils derived from fine-grained, reddish sedimentary rock in chaparral communities between 305 and 790 m msl.	Perennial shrub May–September	**None**—appropriate soils are not present and the project site is outside the known range of the species. If present, this species would be conspicuous, and a lack of observation is considered evidence that it is not present on site.
Davidson's bushmallow *Malacothamnus davidsonii*	—	—	1B.2	Sandy washes within cismontane woodland, coastal scrub, riparian woodland, and chaparral between 180 and 855 m msl.	Perennial deciduous shrub June–January	**None**—the project site is outside the known range of the species, which, within Los Angeles County, lies within the southern San Gabriel Mountains foothills. If present, this species would be conspicuous, and a lack of observation is considered evidence that it is not present on site.
Piute Mountains navarretia *Navarretia setiloba*	—	—	1B.1	Clay or gravelly loam soils in cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland communities between 305 and 2100 m msl.	Annual herb April–July	**Low**—appropriate soils are present. This species was not detected on site in spring 2010 during appropriately timed surveys.
Short joint beavertail *Opuntia basilaris* var. *brachyclada*	—	—	1B.2	Sandy soil or coarse granitic loam within chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon juniper woodland and riparian woodland communities between 425 and 1800 m msl.	Perennial stem succulent April–June	**None**—beavertail cactus on site all fit the description of the common variety (*O. basilaris* var. *basilaris*). If present, this species would be conspicuous, and a lack of observation is considered evidence that it is not present on site.
Chaparral ragwort *Senecio aphanactis*	—	—	2.2	Drying alkaline flats in chaparral, cismontane woodland, and coastal scrub habitats between 15 and 800 m msl.	Annual herb January–April	**Low**—the vernal pool on site may provide suitable habitat. This species was collected from Saugus in 1901. Repeated visits to the vernal pool in spring 2010 did not result in the detection of this species on site.
Greata's aster *Symphyotrichum greatae* [Treated as *Aster greatae* in *The Jepson Manual*]	—	—	1B.3	Mesic habitats in broadleaved upland forest, chaparral, cismontane woodland, riparian woodland and lower montane coniferous forest communities between 300 and 2010 m msl.	Perennial rhizomatous herb June–October	**Low**—this species is known primarily from the San Gabriel and Liebre Mountains, south and north of the project site. Suitable habitat on site is limited to small areas of riparian vegetation type.

Common name *Scientific name*	Federal Status	State Status	CNPS List	Habitat	Growth form Blooming period*	Potential to Occur on Site
Monocots						
Mt. Pinos onion *Allium howellii* var. *clokeyi*	—	—	1B.3	Great Basin scrub and pinyon and juniper woodland communities between 1300 and 1800 m msl.	Perennial bulbiferous herb April–June	**None**—the site is outside the geographic range of the species, which lies northwest of the project site, in the Topatopa Mountains.
Plummer's mariposa lily *Calochortus plummerae*	—	—	1B.2	Rocky and sandy sites, usually of granitic or alluvial material in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest communities between 100 and 1700 m msl.	Perennial bulbiferous herb May–July	**Low**—suitable habitat is present. Appropriately timed surveys conducted on site in spring 2010 did not result in the detection of this species.
California Orcutt grass *Orcuttia californica*	FE	SE	1B.1	Vernal pools between 15 and 660 m msl.	Annual herb April–August	**Low**—the vernal pool on site provides suitable habitat, and this species is known from Cruzan Mesa, within 5 miles of the project site. Repeated visits to the vernal pool in spring 2010 did not result in the detection of this species on site.

Status abbreviations

Federal
FE: federally listed as Endangered
FC: federal Candidate for listing as Endangered or Threatened

State
SE: state listed as Endangered

CNPS lists
1A: presumed extinct in California
1B: rare, threatened, or endangered in California and elsewhere
2: rare, threatened, or endangered in California, but more common elsewhere
4: limited distribution

CNPS threat ranks
0.1: seriously threatened in California
0.2: fairly threatened in California
0.3: not very threatened in California

Oaks

Pursuant to the City of Santa Clarita's Oak Tree Preservation and Protection Guidelines (adopted September 11, 1990): removal, pruning, cutting, or encroachment into the "protected zone" of any tree of the oak genus (*Quercus*) that is 6 inches in circumference (1.91 inches in diameter), as measured 4.5 feet above the mean natural grade (i.e., diameter at breast height [dbh]), is unlawful without first obtaining an oak tree permit. A Heritage oak tree is any oak tree with a dbh of 34 inches or more, or in the case of multiple trunk oak trees, two trunks with a combined dbh of 22 inches or greater.

The protected zone is "a specifically defined area totally encompassing an oak tree within which work activities are strictly controlled. Using the dripline as a point of reference, the protected zone shall commence at a point 5 feet outside of the dripline and extend inwards to the trunk of the tree. In no case shall the protected zone be less than 15 feet from the trunk of an oak tree." Damage is defined as, "any action undertaken which causes or tends to cause injury, death, or disfigurement to a tree. This includes, but is not limited to, cutting, poisoning, burning, overwatering, relocating, or transplanting a protected tree, changing or compacting the natural grade within he protected zone of an oak tree, changing groundwater levels or drainage patterns, or trenching, excavating or paving within the protected zone of an oak tree."

Oak trees on site are present on lower portions of north facing slopes and within drainages in the central-western portion of the project site. Based upon a site survey and review of aerial photographs, it has been determined that a minimum of 12 oak trees are present within the project area, ranging in size to 2 feet in diameter. These are all located within areas mapped as "riparian" on **Figure 4.2-1**.

Sensitive Plant Communities

The CDFG Biogeographic Data Branch, Vegetation Classification and Mapping Program, has developed a List of California Vegetation Alliances, which was used as the classification system for this document. The most recent version of this list, dated December 2009 provides the currently accepted list of vegetation type Alliances. It is based on the classification put forth in the second edition of "A Manual of California Vegetation,"[5] which is the California expression of the National Vegetation Classification.[6]

One of the primary purposes of the classification is to assist in the location and determinations of significance and rarity of vegetation types for tracking purposes in the California Natural Diversity Database (CNDDB). Thus, ranking of types by their rarity and threat is an important facet of the

5 (Sawyer et al. 2009)

6 (Grossman et al. 1998)

classification. This list assigns "Global" and "State" rankings, 1 through 5, using NatureServe's standard heritage program methodology.[7] Alliances given a G1 through a G3 code are considered sensitive. Alliances given a G4 or G5 code are generally considered common enough to not be of concern. However, it does not mean that certain associations contained within them are not rare, particularly within the state. For some, inadequate data are available to determine rarity, and these are marked with a "?"

One of the nine plant communities on the Via Princessa Road Alignment project site, foothill needlegrass grassland (G3? S3?[8]), is denoted as G1, G2, or G3 by CDFG[9] and is therefore considered sensitive. In addition, riparian communities and the vernal pool are considered sensitive due to their regulatory status and the habitat they provide for Rare and Endangered species. Please see **Vegetation**, above, for a more detailed discussion of these plant communities and their distributions on the project site.

Special-Status Wildlife

Special-status wildlife species include those that are state or federally listed as Threatened or Endangered, proposed for listing as Threatened or Endangered, designated as state or federal candidates for listing, considered state Species of Special Concern, or considered a state Fully Protected Animal.

Based on a review of the CNDDB, the Los Angeles Audubon list of Los Angeles County's Sensitive Bird Species, and the biological documentation prepared for the project site and the greater Via Princessa project area, a total of 51 special-status wildlife species were identified that are known to occur in the project region or that may potentially utilize the project site during a sensitive phase of their life histories. Of these 51 species, 20 are not expected due to reasons of habitat unsuitability or geographic range. The remaining 31 species that may potentially occur on site or that were directly observed during the course of surveys are vernal pool fairy shrimp (*Branchinecta lynchi*), San Diego fairy shrimp (*B. sandiegonensis*), Riverside fairy shrimp (*Streptocephalus woottoni*), western spadefoot (*Spea hammondii*), silvery legless lizard (*Anniella pulchra pulchra*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), rosy boa (*Charina trivirgata*), San Diego banded gecko (*Coleonyx variegatus abbottii*), San Bernardino ringneck snake (*Diadophis punctatus modestus*), coast horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), Cooper's hawk (*Accipiter cooperi*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), grasshopper sparrow (*Ammodramus savannarum*), Bell's sage sparrow (*Amphispiza belli belli*), burrowing owl (*Athene cunicularia*), oak titmouse (*Baeolophus inornatus*), Costa's hummingbird (*Calypte costae*), Lawrence's goldfinch (*Carduelis lawrencei*), California horned lark (*Eremophila alpestris*

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7 http://www.natureserve.org/explorer/ranking.htm#interpret

8 Alliances marked with a "?" in the List of California Vegetation Alliances are those for which limited data are available regarding rarity.

9 CDFG, "Vegetation Classification and Mapping Program, List of California Vegetation Alliances" (2007D).

actia), greater roadrunner (*Geococcyx californianus*), loggerhead shrike (*Lanius ludovicianus*), Allen's hummingbird (*Selasphorus sasin*), pallid bat (*Antrozous pallidus*), spotted bat (*Euderma maculatum*), western mastiff bat (*Eumops perotis californicus*), hoary bat (*Lasiurus cinereus*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), San Diego desert woodrat (*Neotoma lepida intermedia*), southern grasshopper mouse (*Onychomys torridus ramona*), and American badger (*Taxidea taxus*).

Table 4.2-3, Special-Status Wildlife Species Observed or Potentially Occurring on the Project Site, identifies these species and provides the species' listing status, habitat requirements, and potential for occurrence.

JURISDICTIONAL WETLANDS AND DRAINAGES

USACE Jurisdiction

Wetlands, creeks, streams, and permanent and intermittent drainages are generally subject to the jurisdiction of the USACE under Section 404 of the federal Clean Water Act. The USACE has jurisdiction up to the "ordinary high water mark" of rivers, creeks, and streams that are considered "waters of the US" as defined by the Clean Water Act. If adjacent wetlands are also present, the limits of jurisdiction extend beyond the ordinary high water mark to the outer edge of such wetlands. Wetlands are defined by USACE as "those areas that are inundated or saturated by surface or groundwater at a frequency or duration to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."[10] The presence and extent of wetland areas are normally determined by examination of the vegetation, soils, and hydrology of a site. The USACE definition of wetlands requires that all three wetland identification criteria be met.

CDFG Jurisdiction

Streambeds within the project site are subject to regulation by the CDFG under Section 1602 of the California Fish and Game Code. A stream is defined under these regulations as a body of water that flows at least periodically or intermittently through a bed or channel having banks, and that supports fish or other aquatic life. In many cases, CDFG's jurisdiction overlaps substantially with the USACE jurisdiction.

10 U.S. Army Corps of Engineers (USACE), Corps of Engineers Wetlands Delineation Manual, 1987.

Table 4.2-3
Special-Status Wildlife Species Observed or Potentially Occurring on the Project Site

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site
Crustaceans					
Vernal pool fairy shrimp *Branchinecta lynchi*	FT	—	—	Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains in astatic rain-filled pools. Inhabit small, clear-water sandstone depression pools and grassed swale, earth slump, or basalt flow depression pools.	**Presumed present**—suitable habitat is present within the vernal pools on site. Cysts of this genus have been collected from on-site habitat but not yet conclusively identified to species. Fairy-shrimp surveys are ongoing as of February 2011.
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE	—	—	Vernal pools on San Diego and Orange County mesas.	**Presumed present**—suitable habitat is present within the vernal pools on site. Cysts of this genus have been collected from on-site habitat but not yet conclusively identified to species. Fairy-shrimp surveys are ongoing as of February 2011.
Riverside fairy shrimp *Streptocephalus woottoni*	FE	—	—	Endemic to western Riverside, Orange, and San Diego Counties In areas of tectonic swales and slump basins in grassland and coastal scrub. Inhabit seasonal pools filled by winter/spring rains. Hatch in warm water later in the season.	**Presumed present**—suitable habitat is present within the vernal pools on site. Fairy-shrimp surveys are ongoing as of February 2011.

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site
Insects					
Monarch butterfly (wintering sites) *Danaus plexippus*	—	—	CDFG Special Animals List	Roosts located in wind-protected tree groves (especially eucalyptus and Monterey cypress), with nectar and water sources nearby. Winter Roost sites extend along the coast from northern Mendocino County to Baja California, Mexico.	**None**—the project site is outside this species' wintering range.
Fish					
Santa Ana sucker *Catostomus santaanae*	FT, FSS	SSC	—	Habitat generalist, but prefers sand, rubble, or boulder bottoms, in cool, clear water with algae to graze.	**None**—freshwater stream or river habitats required by this species are not present on site.
Unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	FE, FSS	SE, CDFG Fully Protected	—	Cool, clear water with abundant vegetation type in weedy pools, backwaters and among emergent vegetation type at the stream edge in small Southern California streams.	**None**—freshwater stream or river habitats required by this species are not present on site.
Arroyo chub *Gila orcuttii*	FSS	SSC	—	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation type and associated invertebrates.	**None**—freshwater stream or river habitats required by this species are not present on site.
Santa Ana speckled dace *Rhinichthys osculus* ssp. 3	FSS	SSC	—	Requires permanent flowing streams with summer water temperatures of 17 to 20 degrees C. Usually inhabits shallow cobble and gravel riffles. Occurs in the headwaters of the Santa Ana and San Gabriel Rivers.	**None**—freshwater stream or river habitats required by this species are not present on site.

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site
Amphibians					
Arroyo toad *Anaxyrus californicus*	FE	SSC	—	Rivers, washes or intermittent streams with sandy banks, willows, cottonwoods and sycamores within valley-foothill, desert riparian and desert wash communities in semi-arid regions; loose gravelly areas of streams in drier parts of range.	**None**—freshwater stream or river habitats required by this species are not present on site.
California red-legged frog *Rana draytonii*	FT	SSC	—	Requires 11 to 20 weeks of permanent water for larval development; must have access to aestivation habitat. Occurs in lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation type.	**None**—permanent water habitats required by this species are not present on site.
Sierra Madre yellow-legged frog *Rana muscosa*	FE, FSS	SSC	—	Always encountered within a few ft. of water. Tadpoles may require 2 to 4 years to complete their aquatic development. Federal listing refers to populations in the San Gabriel, San Jacinto, and San Bernardino Mountains only.	**None**—permanent water habitats required by this species are not present on site.
Western spadefoot *Spea hammondii*	BLMS	SSC	—	Vernal pools and other areas of seasonally ponded water, primarily in grasslands habitats, but can be found in valley-foothill hardwood woodlands.	**Present**—observed within the main vernal pool on site. High potential to be present in the smaller vernal pools as well.
Reptiles					
Western pond turtle *Actinemys marmorata*	BLMS, FSS	SSC	—	Requires basking sites such as partially submerged logs, vegetation type mats, or open mud banks and needs suitable nesting sites in permanent or near permanent bodies of water in many habitat types below 2000 m msl.	**None**—permanent water habitat is not present on site.
Silvery legless lizard *Anniella pulchra pulchra*	FSS	SSC	—	Leaf litter associates with sandy or loose loamy soil of high moisture content under sparse vegetation type.	**Moderate**—suitable habitat is present beneath oak trees and within sandy soils associated with drainage features on site.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	—	—	CDFG Special Animals List	Various habitats in firm, sandy, or rocky soils within sparse vegetation type, open areas, woodlands and riparian communities of deserts and semi-arid areas.	**Present**—observed on site and suitable habitat is present throughout the site.
Rosy boa *Charina trivirgata*	BLMS, FSS	—	—	Habitats with a mix of brushy cover and rocky soil such as coastal canyons and hillsides, desert canyons, washes and mountains in desert and chaparral from the coast to the Mojave and Colorado Deserts.	**High**—suitable habitat is present throughout the site.

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site
Reptiles (continued)					
San Diego banded gecko *Coleonyx variegatus abbotti*	—	—	CDFG Special Animals List	Granite or rocky outcrops in coastal scrub and chaparral habitats.	**Moderate**—suitable habitat is present within rocky areas and steep slopes on site.
San Bernardino ringneck snake *Diadophis punctatus modestus*	FSS	—	—	Surface litter or herbaceous vegetation type in open, relatively rocky areas, often in somewhat moist areas near intermittent streams.	**Moderate**—suitable habitat is present associated with drainage courses on site.
Coast horned lizard *Phrynosoma blainvillii*	BLMS, FSS	SSC	—	Prefers friable, rocky, or shallow sandy soils in scrub and chaparral habitats in arid and semi-arid regions. Requires the presence of native ants for prey.	**High**—suitable habitat is present within most scrub and chaparral communities on site.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	—	SSC	—	A low shrub structure of minimum density. Presumed to take refuge and perhaps overwinter in burrows or woodrat nests. Preys on whiptail lizards (*Aspidoscelis*).	**High**—suitable habitat is present in all scrub and chaparral communities on site.
Two-striped garter snake *Thamnophis hammondii*	BLMS, FSS	SSC	—	Associated with permanent or semi-permanent bodies of water in a variety of habitats from sea level to 2400 m (8000 ft).	**None**—permanent water habitats are not present on site.
Birds					
Cooper's hawk (nesting) *Accipiter cooperii*	—	CDFG Watch List	—	Nests in open forests, groves, or trees along rivers, or low scrub of treeless areas. The wooded area is often near the edge of a field or water opening.	**Moderate**—observed several times during Fall 2010, though nesting could not be confirmed at that time. Nesting habitat is present within trees on site.
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	—	CDFG Watch List	—	Frequents relatively steep, often rocky hillsides with grass and forb patches. Resident in Southern California coastal sage scrub and mixed chaparral.	**High**—nesting habitat is present in all scrub and chaparral communities on site.
Grasshopper sparrow *Ammodramus savannarum*	—	—	CDFG Special Animals List	Occurs in dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches. Apparently a thick cover of grasses and forbs is essential for concealment.	**Moderate**—nesting habitat is present within grassland vegetation type on site.

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site
Bell's sage sparrow *Amphispiza belli belli*	BCC	CDFG Watch List	—	Nests on the ground beneath shrubs or in shrubs 6 to 18 inches above the ground within chaparral communities dominated by fairly dense stands of chamise or in coastal scrub in southern part of the range.	**High**—nesting habitat is present in all scrub and chaparral communities on site.
Burrowing owl (burrow sites) *Athene cunicularia*	BCC, BLMS	SSC	—	Open, dry grassland and desert habitats throughout California, or scrublands characterized by low-growing, widely spaced vegetation type. Dependent upon burrowing mammals, especially California ground squirrel.	**Low**—nesting habitat is present within grassland vegetation type on site; however, these do not support large numbers of ground squirrels or other animals that would provide suitable burrows.
Oak titmouse (nesting) *Baeolophus inornatus*	—	—	ABC, AWL, USBC	Primarily associated with oaks. Occurs in montane hardwood-conifer, montane hardwood, blue, valley, and coastal oak woodlands, and montane and valley foothill riparian habitats in cismontane California, from the Mexican border to Humboldt County.	**Moderate**—suitable nesting habitat is present within oak trees on site.
Costa's hummingbird (nesting) *Calypte costae*	—	—	USBC, AWL, ABC	Occurs primarily in arid scrub and chaparral habitats and in riparian edge. Various herbaceous and woody plants provide flower nectar; also takes small insects and spiders. In winter, exotic shrubs such as bottlebrush important. Nest sometimes located close to water source, but more often well away from water.	**Present**—observed and presumed to nest on site. Nesting habitat is present in all scrub and chaparral communities on site.
Birds (continued)					
Lawrence's goldfinch (nesting) *Carduelis lawrencei*	BCC	—	USBC, AWL, ABC	Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water. Nearby herbaceous habitats used for feeding.	**Moderate**—observed on site and suitable nesting habitat is present within oak trees on site.
Vaux's swift (nesting) *Chaetura vauxi*	—	SSC	—	Redwood, Douglas fir and other coniferous forests. Nests in large hollow trees and snags, often in large flocks. Forages over most terrains and habitats but shows a preference for foraging over rivers and lakes.	**None**—observed on site, but this species does not breed within Southern California.
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	FC, BCC, FSS	SE	—	Nests in riparian jungles of willow, often mixed with cottonwood with an understory of blackberry, nettles, or wild grape.	**None**—suitable extensive riparian habitat is not present on site.

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site
White-tailed kite (nesting) *Elanus leucurus*	—	CDFG Fully Protected	—	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**None**—suitable riparian habitat is not available for nesting.
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	FE, FSS (full species)	SE (full species)	USBC, AWL, ABC (all include full species)	Dense willow thickets are required for nesting and roosting. Nesting site usually near languid stream, standing water, or seep. Most numerous where extensive thickets of low, dense willows edge on wet meadows, ponds, or backwaters.	**None**—suitable riparian habitat is not available for nesting.
California horned lark *Eremophila alpestris actia*	—	CDFG Watch List	LAA (coastal populations)	Frequents grasslands and other open habitats with low, sparse vegetation type.	**Moderate**—suitable nesting habitat is present within grasslands on site.
Prairie falcon (nesting) *Falco mexicanus*	BCC	CDFG Watch List	LAA	Breeds on cliffs in dry, open terrain and forages far afield, even to marshlands and ocean shores.	**None**—cliffs are not present on the project site.
Birds (continued)					
Greater roadrunner *Geococcyx californianus*	—	—	LAA	Year-round resident of steep foothill canyons, desert woodland, and coastal sage scrub.	**Present**—observed and presumed to breed on site.
Loggerhead shrike (nesting) *Lanius ludovicianus*	BCC	SSC	LAA	Found in broken woodlands, savanna, pinyon-juniper woodland, Joshua tree woodland, riparian woodland, desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**Moderate**—observed during the course of coastal California gnatcatcher surveys, but presumed to be a transient due to the low number of sightings; suitable nesting and wintering habitat is present associated with open scrub and grassland margins on site.
Coastal California gnatcatcher *Polioptila californica californica*	FT	SSC	USBC, AWL, ABC	Obligate permanent resident of coastal sage and alluvial scrub habitats below 800 m msl in Southern California.	**Presumed absent**—suitable habitat is present within scrub communities on site; however protocol surveys conducted for this species in summer and fall 2010 were negative, and the species is presumed not to be present.

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site
Vesper sparrow *Pooecetes gramineus*	—	—	LAA	Winters in open grasslands and sparse shrublands in valley and desert regions. Range-wide declines are likely due to conversion of lowland grasslands and shrublands to housing and other commercial developments. Known to avoid small habitat patches and rarely found within habitat patches or along the wildland-suburban interface.[11]	**Not expected to winter on site**—observed on site as a transient individual during gnatcatcher surveys. Does not breed in Southern California. Otherwise suitable on-site wintering habitat is not likely to be extensive enough to support wintering by this species.
Allen's hummingbird *Selasphorus sasin*	—	—	AWL, USBC	Breeders are most common in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats, but also are common in closed-cone pine-cypress, urban, and redwood habitats. Occurs in a variety of woodland and scrub habitats as a migrant. Breeds in sparse and open woodlands, coastal redwoods, and sparse to dense scrub habitats.	**High**—observed on site and nesting habitat is present in all scrub and chaparral communities on site.
Birds (continued)					
Least Bell's vireo *Vireo bellii pusillus*	FE, BCC	SE	USBC, AWL, ABC	Resident below about 600 m (2000 ft) in willows and other low, dense valley foothill riparian habitat. Thickets of willow and other low shrubs afford nesting and roosting cover. May inhabit thickets along dry, intermittent streams.	**Not expected**—marginal habitat on site within small areas of willow and mulefat-dominated vegetation is not adjacent to suitable foraging areas (sparsely vegetated stream bottoms).
Gray vireo *Vireo vicinior*	BCC, BLMS	SSC	USBC, AWL, ABC	Dry chaparral, west of desert, in chamise-dominated habitats; mountains of Mojave desert, associated with Juniper and Artemisia. Forage, nest, and sing in areas formed by a continuous growth of twigs, 1 to 5 ft. above ground.	**Not expected**—chamise-dominated vegetation is common on site, but this species is declining in the region and not expected to occur.
Mammals					
Pallid bat *Antrozous pallidus*	FSS, BLMS	SSC	WBWG High	Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and open buildings.	**Moderate**—roosting habitat is present within trees on site.
Spotted bat *Euderma maculatum*	BLMS	SSC	WBWG High	Habitats occupied include arid deserts, grasslands, and mixed conifer forests from below sea level in California to above 3000 m (10,000 ft) in New Mexico. Prefers to roost in rock crevices. Occasionally found in caves and buildings. Cliffs provide optimal roosting habitat.	**Moderate**—roosting habitat is present within trees on site.
Western mastiff bat *Eumops perotis californicus*	BLMS	SSC	WBWG High	Roosts in crevices in cliff faces, high buildings, trees and tunnels within many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	**Moderate**—roosting habitat is present within trees on site.

11 Allen, LR et al. 2009. Los Angeles County's Sensitive Bird Species. *Western Tanager* 75(3). January/February 2009.

Common name *Scientific name*	Federal status	State status	Other lists	Habitat	Potential to occur on site
Hoary bat *Lasiurus cinereus*	—	—	WBWG Medium	Habitats suitable for bearing young include all woodlands and forests with medium to large-size trees and dense foliage. Generally roosts in dense foliage of medium to large trees.	**Moderate**—roosting habitat is present within trees on site.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	—	SSC	—	Shrub habitats and intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges.	**High**—suitable habitat is present within relatively level grassland and scrub communities on site.
Mammals (continued)					
Lodgepole chipmunk *Neotamias speciosus speciousus*	—	—	CDFG Special Animals List	Usually found in open canopy forests, lodgepole pine forests in the San Bernardino Mountains and chinquapin slopes on the San Jacinto Mountains	**None**—the site is outside the geographic range of the species.
San Diego desert woodrat *Neotoma lepida intermedia*	—	SSC	—	Moderate to dense canopies in coastal scrub of Southern California from San Diego County to San Luis Obispo County. Particularly abundant in rock outcrops, rocky cliffs and slopes.	**High**—suitable habitat is present within all scrub and chaparral communities on site.
Southern grasshopper mouse *Onychomys torridus ramona*	—	SSC	—	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropod prey, especially scorpions and orthopterans.	**Moderate**—suitable habitat is present within scrub and grassland communities on site.
American badger *Taxidea taxus*	—	SSC	—	Drier, open stages of most shrub, forest, and herbaceous habitats with friable soils.	**Moderate**—suitable habitat is present throughout the site; however, the spatial isolation of the site may preclude its usefulness to this species.

Status abbreviations

Federal
FE: Federally listed as Endangered
FT: Federally listed as Threatened
FC: Federal candidate species
BLMS: Bureau of Land Management Sensitive Species
FSS: USDA Forest Service Sensitive
BCC: Fish and Wildlife Service Birds of Conservation Concern priority

State
SE: State-listed as Endangered
SSC: CDFG Species of Special Concern

Other
AWL: Audubon Watchlist
ABC: American Bird Conservancy Green List
LAA: Los Angeles Audubon List of Los Angeles County's Sensitive Bird Species
USBC: United States Bird Conservation Watch List WBWG: Western Bat Working Group: High, Medium and Low

Results

On-site drainages within the project boundaries deliver surface flows in a generally northwest direction where they are captured off site by the City of Santa Clarita's storm drain system, which at these locations is directly tributary to the Santa Clara River. Floral constituents of these drainages are discussed as a vegetation types above, in **Riparian Communities**, **Vernal pool**, and **Hillside seep**, above. There is 0.62 acre of potential CDFG jurisdiction and 0.47 acre of potential USACE jurisdiction on the project site. These acreages include intermittent and ephemeral streams in a generally natural state and setting, a small seep supporting a stand of Mexican wire rush, and a vernal pool wetland. The breakdown of jurisdictional areas by type and regulatory trustee agency is given in **Table 4.2-4, Jurisdictional Areas on the Via Princessa Site**, and their locations on site are shown in **Figure 4.2-2, Jurisdictional Impact Assessment**.

Table 4.2-4
Potential Jurisdictional Areas on the Via Princessa Site

Resource type	CDFG potential jurisdiction [acres]	USACE potential jurisdiction [acres]
Drainages	0.38	0.23
Hillside seep	0.05	0.05
Vernal pool	0.19	0.19
TOTAL	**0.62**	**0.47**

Foreseeable Mitigation Measures

If any of the drainages described above are confirmed to be jurisdictional and are proposed to be impacted, a Mitigation and Management Plan (MMP) shall be developed for approval by the appropriate permitting agencies prior to commencement of grading activities associated with the project. This MMP's major constituents would include the following components:

- Provisions for mulch or native topsoil salvage
- Criteria by which natural vegetation will be judged to be self-sustaining
- Percent cover and species richness targets based on local undisturbed model sites
- Survivorship for planted shrubs and trees
- Maximum allowable non-native species cover
- Targeted invasive species to be eradicated from the site

- Annual mitigation status reporting requirements
- Guidelines for replacement vegetation species palettes
- Guidelines for the design and duration of use of temporary irrigation systems
- Replacement ratios for native riparian trees

PROJECT IMPACTS

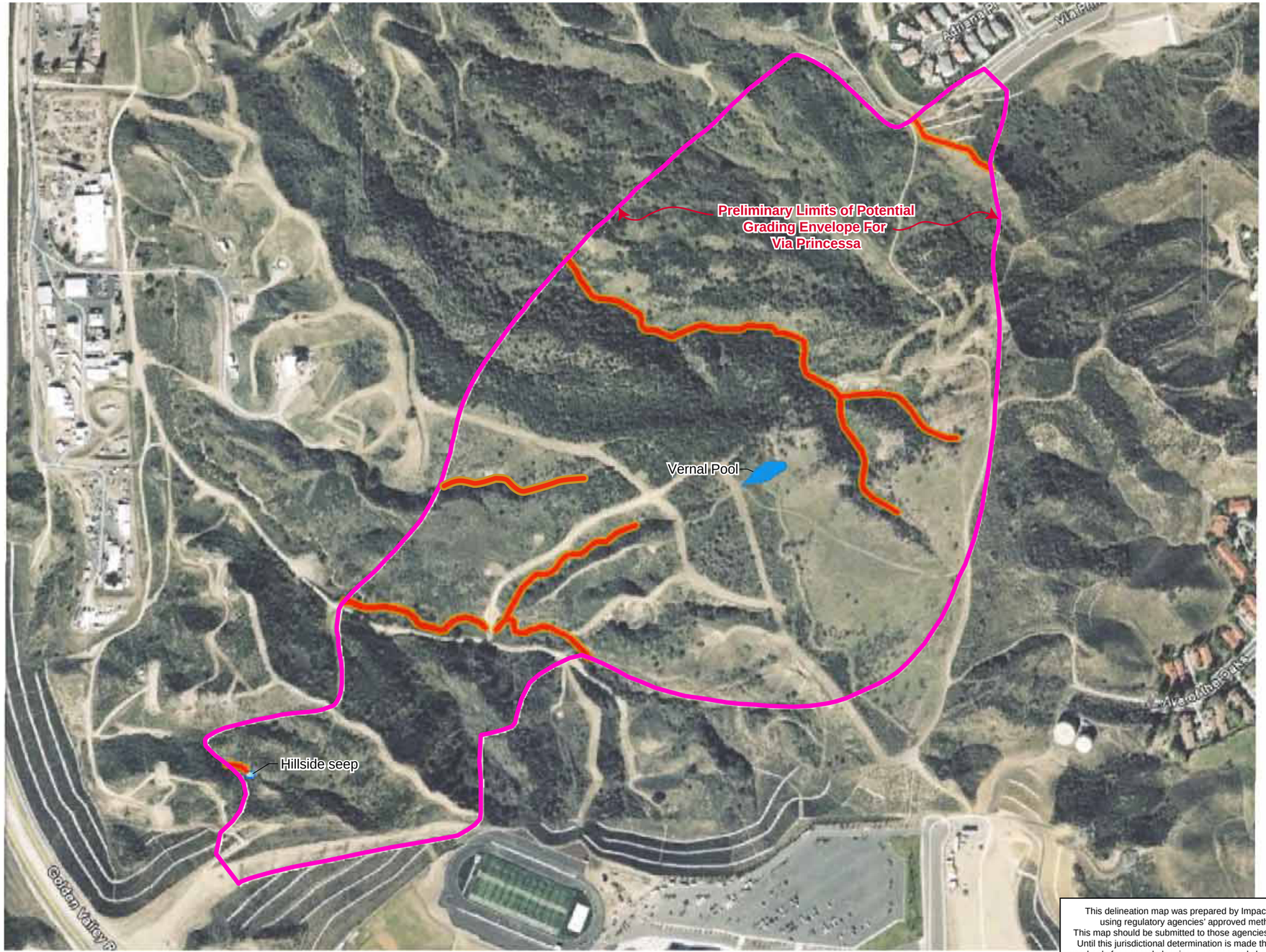
Significance Threshold Criteria

Significant impacts of proposed development on the project site were determined from criteria included in the *California Environmental Quality Act (CEQA) Guidelines*. As stated in Appendix G of the *2007 State CEQA Guidelines*, a project could have a significant impact on the environment if it would result in any of the following:

- 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 CDFG or USFWS.
- Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS.
- Substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Section 15065(a) of the *State CEQA Guidelines* also states that a project may have a significant effect on the environment when the project has the potential for the following:

- Substantially degrade the quality of the environment
- Substantially reduce the habitat of a fish or wildlife species
- Cause a fish or wildlife population to drop below self-sustaining levels



Legend:

Potential Grading Limit

Potentially Permanently Impacted Areas

USACE Waters (Approx. 0.23 acres)

CDFG Streambeds (Approx. 0.38 acres)

Hillside seep
- USACE and CDFG Wetland (0.05 acres)

Vernal Pool
- USACE and CDFG Wetland (0.19 acres)

400 200 0 400

1 inch = 400 feet

This delineation map was prepared by Impact Sciences, Inc. using regulatory agencies' approved methodologies. This map should be submitted to those agencies for concurrence. Until this jurisdictional determination is made this map should be used only for general planning purposes and should not be relied on for purposes such as engineering or impact analysis.

SOURCE: Image - Google Earth 2009
Impact Sciences, Inc. - April 2010

FIGURE **4.2-2**

Jurisdictional Impact Assessment

- Threaten to eliminate a plant or animal community
- Substantially reduce the number or restrict the range of an Endangered, Rare, or Threatened species

These significance criteria are applied to the proposed project.

Impact Analysis

Direct impacts represent the physical alteration (typically habitat degradation or loss) of biological resources that occur on site as a result of project implementation. Indirect impacts are those reasonably foreseeable effects caused by project implementation on remaining or adjacent biological resources. The significance of this alteration, with respect to CEQA, is determined by evaluating the impact in terms of each of the significance threshold criteria defined above. For example, if habitat alteration results in a direct or indirect loss or causes an otherwise substantial adverse effect on a species identified as a "candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFG or USFWS," impacts would be considered significant, assuming appropriate compensatory or other mitigation is not available or feasible. Similarly, if the alteration of habitat results in a substantial adverse effect on a natural community identified as sensitive "in local or regional plans, policies, or regulations, or by the CDFG or USFWS," then this alteration would be considered a significant impact.

An evaluation of whether an impact on biological resources would be "substantial," and, therefore, a significant impact, must consider both the resource itself and the significance threshold criteria being evaluated. For example, because most plant and animal species are dependent on native habitats to satisfy various life cycle requirements, a habitat-based approach that addresses the overall biological value of a particular vegetation type or habitat area is appropriate when determining whether or not alteration of that habitat will "substantially" affect special-status species, sensitive habitats, wetlands, or movement corridors. The relative biological value of a particular habitat area—its functions and values—can be determined by such factors as disturbance history, biological diversity, its importance to particular plant and wildlife species, its uniqueness or sensitivity status, the surrounding environment, and the presence or absence of special-status resources.

However, direct impacts to project and wildlife resources (e.g., active nests and individual plants and animals) are also evaluated and discussed when impacts to these resources, in and of themselves, could be considered significant or conflict with local, state, and federal statutes or regulations. The significance of direct impacts on individuals or populations of plant and animal species takes into consideration the number of individual plants or animals potentially affected, how common or uncommon the species is both on the project site and from a regional perspective and the species' sensitivity status according to resource agencies. These factors are evaluated based on the results of on-site biological surveys and

studies, results of literature and database reviews, discussions with biological experts, and established and recognized ecological and biodiversity theory and assumptions.

Direct Impacts

The following section focuses on the direct effects of proposed project implementation on plant communities, common and special-status plant and wildlife species, special-status habitats, and wildlife movement corridors. At the time of writing of this Draft EIR, grading plans for the Via Princessa Extension are provisional due to uncertainty in final grading envelope. Hence, the entire project site is assumed to be potentially impacted by project implementation. For the impacts to vegetation types, these impacts are not separated into temporary and permanent impacts because the configuration of each impact type is not currently known; however, for non-vegetation specific impacts (wildlife habitat and movement-related impacts) it is presumed that permanent impacts will scale to a footprint approximately 200 ft. X 2,000 ft. in area (*i.e.*, 9.18 acres—the approximate footprint of the final paved surface of the roadway and associated infrastructure), with a maximum temporary impact area of 92.82 acres to be revegetated subsequent to project construction. **Table 4.2-5, Vegetation Impact Summary**, shows the acreage of each vegetation type that would be developed or temporarily disturbed during construction of the proposed project.

Table 4.2-5
Vegetation Impact Summary

Vegetation Type	Total area on site (acres)	Potential impacted area (acres)	Proportion potentially impacted (%)
California annual grassland	13	13	100%
Foothill needlegrass grassland	0.7	0.7	100%
California sagebrush scrub	10.4	10.4	100%
California buckwheat scrub	10.2	10.2	100%
Chamise chaparral	33.1	33.1	100%
Hoaryleaf ceanothus chaparral	23.9	23.9	100%
Riparian communities	1.9	1.9	100%
Vernal pool	0.19	0.19	100%
Hillside seep	0.05	0.05	100%
Disturbed areas	7.3	7.3	100%

Note: Impact area totals 100% because field surveys and impact analysis have been confined to the proposed grading envelope.

Common Plant Communities and Land Covers

California annual grassland – The project site contains 13.0 acres of California annual grassland, all of which could potentially be disturbed by the proposed project. Given the altered condition of this vegetation type and that this habitat type is not considered a sensitive natural community by resource agencies, the loss of California annual grassland would be a less than significant impact.

California sagebrush scrub – The project site contains 10.4 acres of California sagebrush scrub, all of which could potentially be disturbed by the proposed project. Given that this habitat type is not considered a sensitive natural community by resource agencies, the loss of California sagebrush scrub would be a less than significant impact.

California buckwheat scrub – The project site contains 10.2 acres of California buckwheat scrub, all of which could potentially be disturbed by the proposed project. Given that this habitat type is not considered a sensitive natural community by resource agencies, the loss of California buckwheat scrub would be a less than significant impact.

Chamise chaparral – The project site contains 33.1 acres of chamise chaparral, all of which could potentially be disturbed by the proposed project. Given that this habitat type is not considered a sensitive natural community by resource agencies, the loss of chamise chaparral would be a less than significant impact.

Hoaryleaf ceanothus chaparral – The project site contains 23.9 acres of hoaryleaf ceanothus chaparral, all of which could potentially be disturbed by the proposed project. Given that this habitat type is not considered a sensitive natural community by resource agencies, the loss of hoaryleaf ceanothus chaparral would be a less than significant impact.

Disturbed areas – The project site contains 7.3 acres of disturbed areas, all of which could potentially be disturbed by the proposed project. Given the altered condition of this vegetation type and that this habitat type is not considered a sensitive natural community by resource agencies, the loss of disturbed areas would be a less than significant impact.

Wildlife Habitat Loss

The entire project site provides habitat for wildlife. The proposed project could potentially result in the permanent or temporary conversion of up to 102.0 acres of wildlife habitat, including disturbed and undisturbed upland and riparian types. Up to 13.0 acres of California annual grasslands, 0.7 acre of foothill needlegrass grassland, 10.4 acres of California sagebrush scrub, 10.2 acres of California

buckwheat scrub, 33.1 acres of chamise chaparral, 23.9 acres of hoaryleaf ceanothus chaparral, 1.9 acres of riparian communities, and 0.19 acre of vernal pool habitat could be temporarily or permanently removed for the construction of the proposed project. As summarized in **Common Wildlife**, above, and **Table 4.2-5**, the Via Princessa East Extension project site provides habitat for a variety of common and special-status wildlife species. Given the acreage of habitats to be developed or temporarily disturbed, the loss of habitat for common and special-status wildlife species would be a significant impact absent mitigation. Implementation of **Mitigation Measures MM 4.2-1** through **MM 4.2-6** would replace vegetation values temporarily or permanently removed, and would reduce the project impacts to riparian-dependent and non-vernal pool upland-dependent species to below a level of significance. Impacts to vernal-pool dependent species are not mitigable and would remain significant subsequent to project construction.

Impacts to Common Wildlife

In addition to the impacts to vegetation types and wildlife habitat, construction and grading activities associated with the proposed project would directly disturb individuals of common wildlife species on the project site. In particular, species of low mobility (particularly small mammals, amphibians, and reptiles) would be eliminated during site preparation and construction. During the construction period, some individuals may emigrate from the project site and become vulnerable to mortality by predation, auto collisions, and unsuccessful competition for food and territory.

Project implementation is not expected to reduce regional populations of common wildlife species to below self-sustaining levels. Consequently, impacts to common mammal and reptile species would be less than significant. Nonetheless, implementation of **Mitigation Measure MM 4.2-7** would provide less mobile wildlife species the opportunity to move from the disturbance area into adjacent undisturbed habitat.

Construction activities also could result in the direct loss or abandonment of active nests by adult birds of common bird species. The Migratory Bird Treaty Act and the California Fish and Game Code protect active nests of native bird species.[12] Therefore, any construction-related loss of active nests of common bird species would conflict with these federal and state laws and would be considered a significant impact. Implementation of **Mitigation Measure MM 4.2-8** would ensure compliance with state and federal laws protecting active bird nests and would eliminate this potential impact.

12 (See 16 USC §§703-712; see also California Fish and Game Code Sections 3503, 3513.)

Special-status Plant Species

As shown in **Table 4.2-2**, above, the following special-status plant species were eliminated from further consideration because they were determined not to be potentially present on the project site: Braunton's milk-vetch, Nevin's barberry, white-bracted spineflower, Santa Susana tarplant, slender-horned spineflower, San Gabriel bedstraw, Newhall sunflower, Los Angeles sunflower, Ross's pitcher sage, Davidson's bushmallow, short joint beavertail, and Mt. Pinos onion.

Special-status plant species that were observed on the project site during the focused special-status plant surveys include Peirson's morning-glory, Moran's nosegay, and slender mariposa lily.

The following special-status plant species are considered to have a low potential to be present on the site despite not having been detected during surveys in spring 2101: round-leaved filaree, southern tarplant, San Fernando Valley spineflower, Parry's spineflower, Palmer's grapplinghook, Piute Mountains Navarretia, chaparral ragwort, Greata's aster, Plummer's mariposa lily, and California Orcutt grass. Impacts to these species are discussed below.

Peirson's morning-glory is a CNPS List 4.2 plant. This species is typically found in chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, and grasslands. The proposed project would result in the loss of Peirson's morning-glory from the project site. While never abundant, Peirson's morning-glory occurs throughout the Via Princessa project area within grasslands. Given the low sensitivity status of the species, observations were not mapped. CNPS List 4 plants are not considered Rare from a statewide perspective, are not defined as Rare, Threatened, or Endangered pursuant to the California Endangered Species Act, are not eligible for state listing as Threatened or Endangered, and the vulnerability or susceptibility to threats on a statewide basis are considered low at this time,[13] the loss of Peirson's morning-glory would therefore not be considered a substantial adverse effect on a special-status species. Nor would it be expected to reduce regional populations of the species to below self-sustaining numbers. Thus, impacts to Peirson's morning-glory would be less than significant.

Slender mariposa lily is a CNPS List 1B plant. The proposed project would result in the loss or disturbance of 0.7 acre of foothill needlegrass grassland occupied by slender mariposa lily (see "Foothill needlegrass grassland," **Figure 4.2-1**). Given the sensitivity of this species, impacts to this species are considered significant. **Mitigation Measure MM 4.2-9** would reduce impacts to this species to below a level of significance.

13 CNPS, The CNPS Ranking System. Available at http://www.cnps.org/cnps/rareplants/ranking.php

Moran's nosegay is a federally listed Threatened and CNPS List 1B.1 species, reported from chenopod scrub, freshwater marshes and swamps, playas, and vernal pools. This species is relatively common within the on-site vernal pool, and occurs nowhere else on the project site. Within Los Angeles County, the only other extant populations of this species are known from the Cruzan Mesa vernal pool complex, approximately 4 miles northeast of the project site. The proposed project would result in the loss of 0.19 acre of Moran's nosegay habitat. Cruzan Mesa is an active filmmaking site and is regularly disturbed by filmmaking activities, and is therefore not suitable as a mitigation site for this species. Given the rarity of Moran's nosegay and that no viable habitat is available in Los Angeles County for preservation; the project-related loss of this species is an unavoidable significant impact.

Protected Oak Trees

As previously discussed (**Oaks**, above), the City of Santa Clarita protects individuals of any species in the genus *Quercus* that are at least 6 inches in circumference (1.91 inches in diameter), as measured 4.5 feet above the mean natural grade. A Heritage oak tree is any oak tree with a dbh of 34 inches or more, or in the case of multiple trunk oak trees, two trunks with a combined dbh of 22 inches or greater.

The City of Santa Clarita requires that all potential impacts to oak trees be preceded by an application to the City that includes a detailed oak tree report and that loss of or damage to protected oaks be mitigated at a minimum 2:1 ratio.

Based upon general biological surveys of the project site, it has been determined that, a minimum of 12 oak trees may be removed for project construction. The removal of or encroachment to oak trees as a result of project construction would be considered a significant impact under both the City of Santa Clarita and CEQA.

Replacement oak trees would be planted in the number necessary to comply with the requirements stipulated in the Oak Tree Permit issued by the City. Compliance with the permit conditions and implementation of **Mitigation Measure MM 4.2-10** would reduce impacts to oak trees to below a level of significance.

Special-Status Wildlife Species

Certain special-status wildlife species that are known to occur in the project region were eliminated from further consideration in this analysis because the project site lacks suitable habitat to support the species as a resident or nesting species or because surveys have established that the species is not expected to utilize the project site. As shown in **Table 4.2-3**, these species include the following: monarch butterfly, Santa Ana sucker, unarmored threespine stickleback, arroyo chub, Santa Ana speckled dace, arroyo toad,

California red-legged frog, Sierra Madre yellow-legged frog, western pond turtle, two-striped garter snake, western yellow-billed cuckoo, white-tailed kite, southwestern willow flycatcher, prairie falcon, coastal California gnatcatcher, and lodgepole chipmunk.

The following special-status wildlife species were observed during the course of various field surveys conducted on the project site: vernal pool fairy shrimp, San Diego fairy shrimp, Riverside fairy shrimp, western spadefoot, coastal whiptail, and loggerhead shrike.

Based on the presence of suitable habitat on the project site, it is reasonable to conclude that certain special-status species could potentially occur on site prior to grading or construction activities associated with project implementation. Although not observed during surveys, the following species could occur on the project site: silvery legless lizard, rosy boa, San Diego banded gecko, San Bernardino ringneck snake, coast horned lizard, coast patch-nosed snake, Cooper's hawk, Southern California rufous-crowned sparrow, grasshopper sparrow, Bell's sage sparrow, burrowing owl, oak titmouse, Costa's hummingbird, Lawrence's goldfinch, California horned lark, Allen's hummingbird, pallid bat, spotted bat, western mastiff bat, hoary bat, San Diego black-tailed jackrabbit, San Diego desert woodrat, southern grasshopper mouse, and American badger. For the purposes of the following analysis, these species are presumed to occur on the project site.

Vernal pool fairy shrimp (*Branchinecta lynchi*); San Diego fairy shrimp (*B. sandiegonensis*); Riverside fairy shrimp (*Streptocephalus woottoni*). Preliminary fairy shrimp survey results indicate that at least one fairy shrimp species is present on the project site; however, because individuals of this species were encysted at the time of their discovery, a conclusive determination has not been made.[14] Provisionally, and for the purposes of this analysis, all three potentially occurring species are presumed to be present. Suitable habitat is present for each of these three fairy shrimp species within the on-site vernal pool. Within Los Angeles County, the only other extant populations of these species are known from the Cruzan Mesa vernal pool complex, approximately 4 miles northeast of the project site. The proposed project would result in the loss of 0.19 acre of vernal pool habitat. Cruzan Mesa is an active filmmaking site and is regularly disturbed by filmmaking activities, and is therefore not suitable as a mitigation site for these species. Given the rarity of these species and that no viable habitat is available in Los Angeles County for preservation; the project-related loss of these species is an unavoidable significant impact. Prior to any ground disturbing activities, the project proponent will need to comply with the provisions of the Federal Endangered Species Act, including Section 7 consultation in conjunction with USACE 404 permit processing, for the take of a federally listed species.

14 Juhasz, T. Email communication to Joe Decruyenaere, dated July 15, 2010.

Western spadefoot (*Spea hammondii*). The western spadefoot is a Bureau of Land Management Sensitive Species and a California Species of Special Concern. The species prefers open areas with sandy or gravelly soils in a variety of habitats, including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, river floodplains, alluvial fans, playas, and alkali flats. Western spadefoots were observed on site in spring 2010 within the vernal pool, and the species has not otherwise been detected on site, although suitable conditions for this species exist in depressions elsewhere on the site. Depending on the number and extent of western spadefoot on the site that would be disturbed or removed, the loss of this species would be a potentially significant impact. Implementation of **Mitigation measure MM 4.2-11** would reduce impacts to western spadefoot to a less than significant level.

Silvery legless lizard (*Anniella pulchra pulchra*). The silvery legless lizard is a USDA Forest Service Sensitive Species and is designated by CDFG as a California Species of Special Concern. This species may be found in sparsely vegetated areas in a variety of habitats, including beach dunes, chaparral, California sagebrush scrub, oak woodlands, pine forests, pine-oak woodland, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Suitable habitat is present beneath oak trees and within sandy soils associated with drainage features on site, and construction-related activities could result in impacts to individual lizards. Implementation of **Mitigation Measure MM 4.2-12** would reduce this impact to a level that is adverse but not significant.

Coastal whiptail (*Aspidoscelis tigris stehnegeri*). The coastal whiptail is designated by CDFG as a California Special Animal. The coastal whiptail is found in a variety of habitats, primarily in areas where plants are sparse and there are open areas for running. The species is also found in woodland and streamside growth and avoids dense grassland and thick shrub growth. Coastal whiptails were observed during the course of various surveys conducted in 2009 and 2010 surveys, and the subspecies is considered to occur throughout the site. Construction-related activities could result in impacts to individual whiptails. Implementation of **Mitigation Measure MM 4.2-12** would reduce this impact to a level that is adverse but not significant.

Rosy boa (*Charina trivirgata*). The rosy boa is designated by CDFG as a California Special Animal. The rosy boa inhabits rocky shrubland and desert habitats and is attracted to oases and streams but does not require permanent water. Rosy boas were not observed during surveys conducted on the project site in 2010; however, suitable habitat is present on site. Construction-related activities could result in the direct impacts to individual animals. Implementation of **Mitigation Measure MM 4.2-12** would reduce this impact to a level that is adverse but not significant.

San Diego banded gecko (*Coleonyx variegatus abbottii*)—San Diego banded gecko is a CDFG Special Animal which inhabits granite or rocky outcrops in coastal scrub and chaparral habitats. Suitable habitat

is present within rocky areas and steep slopes on site. Construction-related activities could result in the direct impacts to individual animals. Implementation of **Mitigation Measure MM 4.2-12** would reduce this impact to a level that is adverse but not significant.

San Bernardino ringneck snake (*Diadophis punctatus modestus*). The San Bernardino ringneck snake is designated by CDFG as a California Special Animal. The ringneck snake is found in moist habitats, including woodlands, hardwood and conifer forest, grassland, sage scrub, chaparral, croplands, hedgerows, and gardens. San Bernardino ringneck snakes were not observed during surveys conducted on portions of the project area in 2010. Suitable habitat occurs at the project site in association with drainages and other mesic habitats such as north-facing slopes and the vernal pool. Construction-related activities could result in direct impacts to individual animals. Implementation of **Mitigation Measure MM 4.2-12** would reduce the impacts to the San Bernardino ringneck to a level that is adverse but not significant.

Coast horned lizard (*Phrynosoma blainvillei*). The coast horned lizard is listed as a California Species of Special Concern. The species is found in a wide variety of vegetation types with the requisite loose sandy soils, including California sagebrush scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest. Coast horned lizard was not observed on site during the 2010 surveys, but suitable habitat is present in many areas of the site. Construction-related activities could result in impacts to individual horned lizards. Implementation of **Mitigation Measure MM 4.2-12** would reduce this impact to a level that is less than significant.

Coast patch-nosed snake (*Salvadora hexalepis virgultea*). The coast patch-nosed snake is listed as a California Species of Special Concern. It occupies desert scrub, coastal chaparral, washes, sandy flats, and rocky areas. Coast patch-nosed snakes were not observed during surveys conducted on the site in 2010. Suitable habitat occurs in association with scrub habitat on site, and coast patch-nosed snake is presumed to occur in areas supporting this habitat type. Construction-related activities could result in direct impacts to individual animals. Implementation of **Mitigation Measure MM 4.2-12** would reduce this impact to the coast patch-nosed snake to a level that is adverse but not significant.

Cooper's hawk (*Accipiter cooperii*). The Cooper's hawk is on CDFG Watch List. Cooper's hawks are found in areas with dense stands of live oak, riparian, or other forest communities near water. The Cooper's hawk frequents landscapes where wooded areas occur in patches and groves and often uses patchy woodlands and edges with snags for perching. Cooper's hawk was not observed on site during 2010 survey; however, suitable habitat is present and construction-related activities could result in the loss or abandonment of active nests on site. Depending on the number and extent of this species' nests on the site that may be disturbed or removed, the loss of active nests could be a potentially significant

impact. Implementation of **Mitigation Measure MM 4.2-8** would reduce impacts to nesting Cooper's hawks to a level that is adverse but not significant.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*). The Southern California rufous-crowned sparrow is on CDFG Watch List. The rufous-crowned sparrow occupies moderate to steep hillsides that are rocky, grassy, or covered by coastal sage scrub or chaparral. Southern California rufous-crowned sparrow was not observed on site during 2010 survey; however, suitable habitat is present and construction-related activities could result in the loss or abandonment of active nests on site. Depending on the number and extent of this species' nests on the site that may be disturbed or removed, the loss of active nests could be a potentially significant impact. Implementation of **Mitigation Measure MM 4.2-8** would reduce impacts to nesting Southern California rufous-crowned sparrow to a level that is adverse but not significant.

Grasshopper sparrow (*Ammodramus savannarum*). The grasshopper sparrow has been designated by CDFG as a California Species of Special Concern. The species frequents dense, dry, or well-drained grassland, especially native grassland with a mix of grasses and forbs for foraging and nesting. Grasshopper sparrows require fairly continuous native grassland areas with occasional taller grasses, forbs, or shrubs for song perches. No observations of the grasshopper sparrow have been made within the project area, but potential habitat exists on site. Depending on the number and extent of this species' nests that may be disturbed or removed, the loss of active nests would be a potentially significant impact. Implementation of **Mitigation Measure MM 4.2-8** would reduce this impact to a level that is adverse but not significant.

Bell's sage sparrow (*Amphispiza belli belli*). The scrub habitats on site provide suitable nesting habitat for this species. Should this species occur on the site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' nests that may be disturbed or removed, the loss of active nests would be a potentially significant impact. Implementation of **Mitigation Measure MM 4.2-8** would reduce this impact to a level that is adverse but not significant.

Burrowing owl (*Athene cunicularia*). The burrowing owl is a Bird of Conservation Concern and designated by CDFG as a California Species of Special Concern. In California, burrowing owls are yearlong residents of flat, open, dry grassland and desert habitats at lower elevations. They can inhabit annual and perennial grasslands and scrublands characterized by low-growing vegetation. Burrowing owl was not observed on site during 2010 survey; however, suitable habitat is present and construction-related activities could result in the loss or abandonment of active nests on site. Depending on the number and extent of this species' nests on the site that may be disturbed or removed, the loss of active

nests could be a potentially significant impact. Implementation of **Mitigation Measures MM 4.2-8** and **MM 4.2-13** would reduce impacts to nesting and wintering burrowing owls to a level that is adverse but not significant.

Oak titmouse (*Baeolophus inornatus*). The oak titmouse is designated by CDFG as a California Special Animal. Oak titmouses inhabit a variety of habitat types, but are primarily associated with oaks, especially those in warm, dry habitats. Oak titmouse was not observed on site during 2010 survey; however, suitable habitat is present and construction-related activities could result in the loss or abandonment of active nests on site. Depending on the number and extent of this species' nests on the site that may be disturbed or removed, the loss of active nests could be a potentially significant impact. Implementation of **Mitigation Measure MM 4.2-8** would reduce impacts to this species to a level that is adverse but not significant.

Costa's hummingbird (*Calypte costae*). Costa's hummingbird is designated by CDFG as a California Special Animal. Primary habitats are desert wash, edges of desert riparian and valley foothill riparian areas, coastal scrub, desert scrub, desert succulent scrub, lower-elevation chaparral, and palm oasis. Costa's hummingbird was not observed on site during 2010 survey; however, suitable habitat is present and construction-related activities could result in the loss or abandonment of active nests on site. Depending on the number and extent of this species' nests on the site that may be disturbed or removed, the loss of active nests could be a potentially significant impact. Implementation of **Mitigation Measure MM 4.2-8** would reduce impacts to this species to a level that is adverse but not significant.

Lawrence's goldfinch (*Carduelis lawrencei*). The Lawrence's goldfinch is designated by CDFG as a California Special Animal. Lawrence's goldfinches are found in cropland and hedgerows, shrubland and chaparral, conifer, hardwood and mixed woodlands. Lawrence's goldfinch was not observed on site during 2010 survey; however, suitable habitat is present and construction-related activities could result in the loss or abandonment of active nests on site. Depending on the number and extent of this species' nests on the site that may be disturbed or removed, the loss of active nests could be a potentially significant impact. Implementation of **Mitigation Measure MM 4.2-8** would reduce impacts to this species to a level that is adverse but not significant.

California horned lark (*Eremophila alpestris*). The California horned lark is on CDFG Watch List. California horned larks are common and abundant residents in a variety of open habitats, usually where trees and shrubs are absent. California horned lark was not observed on site during 2010 surveys; however, suitable habitat is present and construction-related activities could result in the loss or abandonment of active nests on site. Depending on the number and extent of this species' nests on the site that may be disturbed or removed, the loss of active nests could be a potentially significant impact.

Implementation of **Mitigation Measure MM 4.2-8** would reduce impacts to this species to a level that is adverse but not significant.

Greater roadrunner (*Geococcyx californianus*). The greater roadrunner is considered sensitive within Los Angeles County by Los Angeles Audubon because of habitat loss and resultant population declines within the County. It is a year-round resident of steep foothill canyons, desert woodland, and coastal sage scrub. Greater roadrunner was observed on site during the course of California gnatcatcher surveys and is presumed to breed on site. Construction-related activities could result in the loss or abandonment of active nests on site. Depending on the number and extent of this species' nests on the site that may be disturbed or removed, the loss of active nests could be a potentially significant impact. Implementation of **Mitigation Measure MM 4.2-8** would reduce impacts to this species to a level that is adverse but not significant.

Loggerhead shrike (*Lanius ludovicianus*). The loggerhead shrike is a Bird of Conservation Concern and has been designated by CDFG as a California Species of Special Concern. The species occurs most frequently in riparian areas along the woodland edge, grasslands with sufficient perching and butchering sites, scrublands, and open-canopied woodlands, although they can be quite common in agricultural and grazing areas and can sometimes be found in mowed roadsides, cemeteries, and golf courses. Loggerhead shrike was observed on site during coastal California gnatcatcher surveys, and suitable habitat is present associated with open scrub and grassland margins on site; however, no mapped locations were recorded. Should this species nest on or immediately adjacent to the site, construction-related activities could result in the loss or abandonment of active nests. Depending on the number and extent of active nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. In order to avoid this impact to the loggerhead shrike, the project applicant would implement mitigation measures to reduce the impacts to loggerhead shrike before and during construction. Implementation of **Mitigation Measure MM 4.2-8** would result in the avoidance of impacts and, therefore, a significant impact would not occur.

Allen's hummingbird (*Selasphorus sasin*). Allen's hummingbird most commonly occurs within coastal scrub, valley foothill hardwood, and valley foothill riparian habitats, but also may be common in closed-cone pine-cypress, urban, and redwood habitats. Nesting habitat for this species is present in all scrub and chaparral communities on site. If nesting occurs on site, construction-related activities could result in the loss or abandonment of active nests during that year's nesting season. Depending on the number and extent of this species' nests on the site that may be disturbed or removed, the loss of active nests could be a significant impact. Implementation of **Mitigation Measure MM 4.2-8** would reduce impacts to rufous hummingbirds to a level that is adverse but not significant.

Pallid bat (*Antrozous pallidus*); spotted bat (*Euderma maculatum*); western mastiff bat (*Eumops perotis californicus*); hoary bat (*Lasiurus cinereus*). Bat surveys were not conducted on site; however, suitable roosting habitat for these species is present within trees on site. Should active bat roosts be present, construction-related activities could result in the direct loss or abandonment of active roost sites. Depending on the number and extent of roosts that may be disturbed or removed, impacts to special-status bat species could be significant. **Mitigation Measure MM 4.2-14** requires that no earlier than 30 days prior to the commencement of construction activities, a pre-construction survey shall be conducted by a qualified biologist to determine whether active roosts of special-status bats are present on or within 300 feet of the project disturbance boundaries. Should an active maternity roost be identified (the breeding season of native bat species in California generally occurs from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, at the discretion of the biological monitor, until the roost is vacated and juveniles have fledged, as determined by the biologist. **Mitigation Measure MM 4.2-15** requires the project applicant to prepare and implement a bat roost site creation plan that would establish alternative roost sites within suitable preserved open space located at an adequate distance from sources of human disturbance. Implementation of these mitigation measures would reduce this impact to a level that is not significant.

San Diego black-tailed jackrabbit (*Lepus californicus*). The San Diego black-tailed jackrabbit is listed as a California Species of Special Concern. The black-tailed jackrabbit occupies many diverse habitats, but is primarily found in arid regions supporting shortgrass habitats. San Diego black-tailed jackrabbit was not observed on site during 2010 surveys; however, the species may occur in suitable habitat throughout the site. Construction-related activities could result in impacts to individual black-tailed jackrabbit. Implementation of **Mitigation Measure MM 4.2-16** would reduce this impact to a level that is adverse but not significant.

San Diego desert woodrat (*Neotoma lepida intermedia*). The San Diego desert woodrat is listed as a California Species of Special Concern. Desert woodrats are found in a variety of shrub and desert habitats and are primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Although not directly observed on site during 2010 surveys, this species is presumed to be present within appropriate habitat areas. Construction-related activities would result in the direct loss of individual woodrats or active woodrat nests (stick houses). Implementation of **Mitigation Measure MM 4.2-16** would reduce the magnitude of impacts to the San Diego desert woodrat to less than significant.

Southern grasshopper mouse (*Onychomys torridus*). The southern grasshopper mouse is designated by CDFG as a California Species of Special Concern. The southern grasshopper mouse is found rangewide in low arid scrub and semi-scrub vegetation type, and the subspecies *O. t. ramona* (which is the subspecies designated as a California Species of Special Concern) occurs in grasslands and sparse coastal scrub

habitats. This species has the potential to occur on site in scrub and grassland habitat. Should this species occur on site, construction-related activities could result in direct impacts to southern grasshopper mouse individuals. In order to reduce impacts to this species, the project applicant would conduct biological monitoring during ground-disturbing activities, in an effort to salvage animals that may be discovered during construction activities. These measures will reduce impacts to southern grasshopper mouse individuals to the extent feasible and practicable, reducing impacts to a level that is less than significant.

American badger (*Taxidea taxus*). The American badger is listed as a California Species of Special Concern (CSC). Badgers are generally associated with dry, open, treeless regions, prairies and grasslands, low-intensity agriculture (e.g., pasture and dryland crops), drier open shrublands and forest, parklands, and cold desert areas. Badgers have not been observed on site; however, suitable habitat is present, and construction-related activities could result in impacts to individual American badgers. Potentially significant impacts to American badgers could occur without mitigation, depending on the number and extent of the species on site that may be disturbed or removed. Implementation of **Mitigation Measure MM 4.2-17** would reduce impacts to the American badger to a less than significant level.

Sensitive Plant Communities

One of the nine plant communities on the Via Princessa East Extension project site, foothill needlegrass grassland (G3? S3?), is denoted as G1, G2, or G3 by CDFG[15] and is therefore considered sensitive. In addition, riparian communities and the vernal pool are considered sensitive due to their regulatory status and the habitat they provide for Rare and Endangered species. Impacts to these sensitive plant communities are discussed below.

Foothill needlegrass grassland (G3? S3?). The project site contains 0.7 acre of foothill needle grass grassland, all of which could potentially be developed. Given the sensitivity of this vegetation type, the loss of foothill needle grass grassland would be a significant impact. Implementation of project **Mitigation Measures MM 4.2-1–MM 4.2-6** would reduce impacts to this vegetation type to below a level of significance.

Riparian communities. The project site contains 1.9 acres of riparian communities. The proposed project could potentially result in the conversion of all on-site acres of this vegetation type. Riparian communities in the project area constitute CDFG and USACE jurisdiction, and impacts to this vegetation type would be considered significant. Implementation of project **Mitigation Measures MM 4.2-1–MM 4.2-6** would reduce impacts to this vegetation type to below a level of significance.

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15 CDFG, "Vegetation Classification and Mapping Program, List of California Vegetation Alliances" (2007D).

Vernal pool. The project site contains one 0.19-acre vernal pool, which would potentially be entirely displaced by proposed project development. Because vernal pools are Rare within the state and Los Angeles County, and because they provide habitat for highly endemic Rare and Endangered species, this impact is considered significant. Impacts to this vegetation type cannot be mitigated.

Jurisdictional Resources

Table 4.2-4, and **Figure 4.2-2** indicate a maximum of 0.51 acre of CDFG and 0.85 acre of USACE jurisdiction presently exist on site and may be permanently impacted within the boundaries of the proposed Via Princessa Road Extension project with project implementation, including impacts to the vernal pool wetland.

Most impacts to areas delineated as "waters of the United States," if determined to be jurisdictional by the USACE, require approval under the authority of the Clean Water Act and its implementing regulations.

Section 404 Permits

The deposition of fill to an area delineated as "waters of the United States," including wetlands, and determined to be under the USACE jurisdiction, requires a permit or other approval by USACE Regulatory Branch. Fill is broadly defined to include most materials (e.g., rock, soil, pilings, concrete, wood, some incidental fallback of soil from earth-moving equipment, and in some cases additional water) that can be discharged into a water or wetland.

Most Section 404 permits require mitigation for reducing overall impacts to overall wetlands, including "waters of the United States" and their functions.

Streambed Alteration Agreements

Any project that impacts CDFG jurisdictional areas, including fills, vegetation removal, or bridging, requires a Section 1602 Streambed Alteration Agreement from CDFG. Much of the same information (i.e., project description, potential impacts, mitigation measures, etc.) necessary to apply for USACE Section 404 permits is required for the Streambed Alteration Agreement application.

Section 401 Certification

Section 401 of the federal Clean Water Act authorizes the State of California to certify that federal permits and licenses do not violate the state's water quality standards. The state's implementing regulations to conduct certifications are codified under the California Code of Regulations Title 23 Waters, Sections 3830-3869. Projects qualifying for an USACE Section 404 permit must submit materials for review to the appropriate Regional Water Quality Control Board (RWQCB) and request a Section 401 certification. Much of the same information (project description, potential impacts, mitigation measures) necessary to apply for USACE Section 404 and CDFG Section 1602 permits is required for the Section 401 Certification.

The Section 401 Certification requires that certain federal permits, including USACE Section 404 permits, must be certified as meeting the state's water quality standards. An application must be submitted to the RWQCB for approval. Much of the same information (project description, potential impacts, and mitigation measures) necessary to apply for USACE Section 404 and CDFG Section 1602 permits is required for the Section 401 Certification.

In response to certain federal court decisions that limited USACE jurisdiction, the state issued several directives to the regional boards regarding the regulation of isolated waters no longer regulated by the USACE. At present, the State Board and the RWQCBs are to:

1. continue issuing Section 401 certifications for federal permits;

2. issue Waste Discharge Requirements (WDRs) for dredge or fill discharges to waters deemed by the USACE as not subject to federal jurisdiction referencing the same regulatory considerations that are used to issue general WDRs.

A Section 401 certification and a WDR applications may be made on the same form, but the State Board has issued a model letter to be submitted with the WDR application to clarify that the WDRs are intended to cover "waters of the State" not covered by the Section 401 certification, and not subject to the USACE regulations.

This planning level discussion is a conservative estimate of what jurisdictional resources may exist and be impacted on site presently; a formal delineation consistent with USACE protocol and an impact analysis shall be conducted prior to project implementation, during the permit process.

The fill, removal, or disturbance of these jurisdictional resources would be a significant impact. Implementation of project **Mitigation Measures MM 4.2-1–MM 4.2-6**, and **MM 4.2-18** would reduce impacts to jurisdictional resources to below a level of significance.

Indirect Impacts

Indirect impacts to biological resources would occur in those habitat areas surrounding the development envelope, as well as in remaining habitat areas within the proposed development area, both during and after the completion of the proposed project. Indirect impacts on biological resources as a result of project development on the site can include the following:

1. Increased lighting and glare effects on wildlife species in remaining and adjacent open space areas
2. A potential increase in pesticides, herbicides and pollutants into adjacent drainages, creeks, rivers and wetlands, as a result of landscaping irrigation and stormwater runoff
3. An increase in non-native plant and wildlife species that are adapted to more urban environments and can out compete native species for available resources, thus reducing the distribution and population of native species
4. Increased human activity and domestic animal presence that can disturb natural habitat areas and displace wildlife populations
5. Erosion and dust resulting from construction and grading activities

Indirect impacts associated with the proposed project are not quantifiable, but are reasonably foreseeable. As such, the following discussion identifies expected types of secondary impacts and their relative magnitude, so that decision makers and the general public are aware of the indirect impact potential associated with implementation of the proposed project. This type of analysis is consistent with the requirements of CEQA.

Increased Light and Glare

The development of a road through the project site would increase the number of nighttime light and glare sources on the site over current levels, which are currently low to non-existent. Nighttime lighting can disturb resting and foraging behavior and can potentially alter breeding cycles and nesting behavior. If uncontrolled, such lighting could adversely impact the composition and behavior of the animal species that occur in the area. Because of the potential disruption to breeding, movement, and foraging behavior of wildlife species, without mitigation, increased nighttime lighting and glare associated with the proposed project is a significant impact. Implementation of **Mitigation Measure MM 4.2-18** would reduce potential impacts resulting from increased light and glare to below a level of significance.

Landscaping Irrigation and Stormwater Runoff

Over irrigation of landscaped areas, especially when combined with the use of chemicals, could lead to runoff that contains pesticides, herbicides, nitrates, and other contaminants. Any runoff that flows into natural drainages or water bodies containing high levels of nutrients, particularly fertilizers and waste products such as nitrogen and phosphorous, could result in eutrophication (excessive nutrient buildup). This, in turn, could result in a depletion of available oxygen due to increased biological oxygen demand (BOD) and reduce available dissolved oxygen for aquatic organisms. Other chemicals, pesticides, and herbicides could also adversely affect aquatic systems. In addition, paved surfaces would contribute increased runoff during storm events. Depending on the magnitude and frequency of storm events and the overall level of water quality, this runoff could cause increased eutrophication, depleted oxygen levels, long-term buildup of toxic compounds and heavy metals, and other adverse effects to biological resources associated with aquatic systems downstream of the project site.

Project Design Features (PDFs) incorporated into the project to address water quality and hydrologic impacts include site design, source control, treatment control, hydromodification control, and Best Management Practices (BMPs). Stormwater runoff from paved surfaces will be routed to bioretention areas, media filtration, or dry extended detention basin treatment control PDFs. Collectively, the water quality treatment control PDFs will treat the pollutants of concern in runoff from the project site.

Increase in Populations of Non-Native Plant Species

After project completion, a number of non-native plant species that are more adapted to urban environments could increase in population and potentially displace native species within remaining undeveloped portions of the project site and surrounding area because of the ability of non-natives to compete more effectively for resources. It is unknown to what degree non-native plant species will displace native species in adjacent habitat areas. However, because non-native and exotic plants are commonly included in landscaping and are known to proliferate along roadsides and other areas of disturbance, it can be reasonably concluded that project development could result in identifiable increases in non-native or exotic plant populations.

In particular, these plant species are often more adapted to a wider variety of growing conditions and can out-compete native plant populations for available nutrients, prime growing locations and other resources. Because these plants reproduce so quickly and in such large numbers, these species can quickly replace many native plant populations, resulting in lower species diversity, loss of suitable breeding or nesting habitat for common and special-status wildlife species, changes to the riparian ecosystem and overall reductions in habitat values. Therefore, the impact on native biological resources

as a result of increased non-native plant species is considered potentially significant. Implementation of **Mitigation Measure MM 4.2-19** would reduce the magnitude of impacts resulting from increased non-native plant populations to below a level of significance.

Construction and Grading Activities

Construction and grading activities associated with project implementation could adversely affect sensitive vegetation type and wildlife within portions of the ecosystem not directly affected. These activities can result in the following impacts:

1. Siltation and erosion into creek and river drainages that could adversely affect fish spawning and movement
2. Excessive dust accumulation on vegetation type that could result in the degradation or loss of some plant species
3. Soil compaction around remaining trees

These impacts will be minimized through implementation of construction BMPs that will meet or exceed measures required by the General Construction Permit. A Stormwater Pollution and Prevention Plan (SWPPP) will be developed as required by, and in compliance with, the General Construction Permit Conditions. The General Permit requires the SWPPP to include a menu of BMPs to be selected, implemented and maintained based on the phase of construction and weather conditions to effectively control erosion and sediment to the Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology (BAT/BCT).[16] BMPs to be included in this menu include, among others: slope stabilization using rock or vegetation type, re-vegetation type, hydro-seeding or using tackifiers on exposed areas, installation of energy dissipaters, drop structures, catch basin inlet

[16] BAT/BCT are Clean Water Act technology-based standards that are applicable to construction site stormwater discharges. Federal law specifies factors relating to the assessment of BAT including: age of the equipment and facilities involved; the process employed; the engineering aspects of the application of various types of control techniques; process changes; the cost of achieving effluent reduction; non-water quality environmental impacts (including energy requirements); and other factors as the administrator of the U.S. EPA deems appropriate. Clean Water Act §304(b)(2)(B). Factors relating to the assessment of BCT include reasonableness of the relationship between the costs of attaining a reduction in effluent and the effluent reduction benefits derived; comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources; the age of the equipment and facilities involved; the process employed; the engineering aspects of the application of various types of control techniques; process changes; non-water quality environmental impact (including energy requirements); and other factors as the administrator deems appropriate. Clean Water Act §304(b)(4)(B). The administrator of the U.S. EPA has not issued regulations specifying BAT or BCT for construction site discharges.

protection, construction materials management, and cover and containment of construction materials and wastes. On this basis, the construction-related impacts of the project are considered less than significant.

PROJECT MITIGATION MEASURES

MM 4.2-1 Vegetation types temporarily impacted by the proposed project, including those within CDFG and USACE jurisdictional areas, shall be revegetated with the same vegetation type except for the California annual grassland. To facilitate restoration, mulch, or native topsoil (the top 6 to 12 inch deep layer containing organic material), may be salvaged from the work area prior to construction. Following construction, salvaged topsoil shall be returned to the work area and placed in the restoration site. Within one year, the project biologist will evaluate the progress of restoration activities in the temporary impact areas to determine if natural recruitment has been sufficient for the site to reach performance goals. In the event that native plant recruitment is determined by the project biologist to be inadequate for successful habitat establishment, the site shall be revegetated through seeding or container plants, and a temporary irrigation system may be recommended.

In conjunction with the development of mitigation plans for CDFG 1602 and USACE 404 permits, the above-described revegetation plan shall be developed so as to be consistent with CDFG and USACE requirements.

MM 4.2-2 The revegetation site will be considered "complete" upon meeting all of the following success criteria:

1. Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion.

2. The percent cover and species richness of native vegetation type shall be evaluated based on local reference sites established by CDFG and the USACE for the plant communities in the impacted areas.

3. Native shrubs and trees shall have at least 80 percent survivorship after two years beyond the beginning of the success evaluation start date. This may include natural recruitment.

4. Non-native species cover will be no more than 5 percent absolute cover through the term of the restoration.

5. Giant reed (*Arundo donax*), tamarisk (*Tamarix ramosissima*), perennial pepperweed (*Lepidium latifolium*), tree of heaven (*Ailanthus altissima*), pampas grass (*Cortaderia*

selloana) and any other species listed on the California State Agricultural list, or Cal-IPC list of noxious weeds will not be present on the revegetation site as of the date of completion approval.

MM 4.2-3 An annual mitigation status report shall be submitted to the USACE and CDFG by April 1 of each year until satisfaction of success criteria identified in **MM 4.2-2**. This report shall include any required plans for plant spacing, locations of candidate restoration and weed control sites or proposed "in-lieu fees," restoration methods, and vegetation type restoration performance standards. For active vegetation type creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation type effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation type, bare areas, and exotic vegetation type; an accounting of colonization by native plants; and photographs.

MM 4.2-4 Replacement vegetation types shall be designed to replace the functions and values of the vegetation types being removed. The replacement vegetation types shall have similar dominant trees and understory shrubs and herbs (excluding exotic species) to those of the affected vegetation types (see **Table 4.2-6, Potential Plant Species for use in Site Restoration** for example of recommended plant species). In addition, the replacement vegetation types shall be designed to replicate the density and structure of the affected vegetation types once the replacement vegetation types have met the mitigation success criteria.

Table 4.2-6
Potential Plant Species for use in Site Restoration

Trees	
blue elderberry	*Sambucus nigra* ssp. *caerulea*
coast live oak	*Quercus agrifolia* var. *agrifolia*
hollyleaf cherry	*Prunus ilicifolia* ssp. *ilicifolia*
Fremont cottonwood	*Populus fremontii* ssp. *fremontii*
arroyo willow	*Salix lasiolepis*
Shrubs	
skunk bush	*Rhus aromatica*
poison-oak	*Toxicodendron diversilobum*
California sagebrush	*Artemisia californica*
big sagebrush	*Artemisia tridentata* ssp. *tridentata*
mulefat	*Baccharis salicifolia*

Shrubs (continued)	
pine-leaf goldenbush	*Ericameria pinifolia*
spineless horsebrush	*Tetradymia canescens*
thick-leaved yerba santa	*Eriodictyon crassifolium*
beavertail cactus	*Opuntia basilaris* var. *basilaris*
golden currant	*Ribes aureum*
chaparral currant	*Ribes malvaceum*
purple sage	*Salvia leucophylla*
black sage	*Salvia mellifera*
California buckwheat	*Eriogonum fasciculatum*
hoaryleaf ceanothus	*Ceanothus crassifolius*
buckbrush	*Ceanothus cuneatus*
redberry	*Rhamnus crocea*
chamise	*Adenostoma fasciculatum*
mountain mahogany	*Cercocarpus betuloides* var. *betuloides*
toyon	*Heteromeles arbutifolia*
Whipple's yucca	*Yucca whipplei*
Herbs	
California goosefoot	*Chenopodium californicum*
California biscuitroot	*Lomatium californicum*
common lomatium	*Lomatium utriculatum*
scapellote	*Acourtia microcephala*
California thistle	*Cirsium occidentale* var. *californicum*
California aster	*Corethrogyne filaginifolia*
clustered tarplant	*Deinandra fasciculata*
fleabane aster	*Erigeron foliosus* var. *foliosus*
golden yarrow	*Eriophyllum confertiflorum* var. *confertiflorum*
slender sunflower	*Helianthus gracilentus*
coast goldfields	*Lasthenia californica*
California cottonrose	*Logfia filaginoides*
small wirelettuce	*Stephanomeria exigua*
wire-lettuce	*Stephanomeria pauciflora*
twiggy wreathplant	*Stephanomeria virgata*
everlasting nest-straw	*Stylocline gnaphaloides*
rancher's fireweed	*Amsinckia menziesii* var. *intermedia*
slender combseed	*Pectocarya linearis* ssp. *ferocula*
valley popcorn-flower	*Plagiobothrys canescens*
coastal chaparral morning-glory	*Calystegia macrostegia* ssp. *cyclostegia*
Peirson's morning-glory	*Calystegia peirsonii*
manroot	*Marah macrocarpus*
Santa Barbara milkvetch	*Astragalus trichopodus*
miniature lupine	*Lupinus bicolor*
stinging lupine	*Lupinus hirsutissimus*
blunt-leaved lupine	*Lupinus truncatus*
chia	*Salvia columbariae* var. *columbariae*
California wishbone bush	*Mirabilis laevis* var. *crassifolia*

Herbs (continued)	
California suncups	*Camissonia californica*
miniature suncup	*Camissonia micrantha*
winecup clarkia	*Clarkia purpurea* ssp. *quadrivulnera*
California poppy	*Eschscholzia californica*
Turkish rugging	*Chorizanthe staticoides*
wavy-leaf soap plant	*Chlorogalum pomeridianum* var. *pomeridianum*
blue-eyed-grass	*Sisyrinchium bellum*
giant wildrye	*Leymus condensatus*
Coast Range melic	*Melica imperfecta*
foothill needlegrass	*Nassella lepida*
purple needlegrass	*Nassella pulchra*
one-sided bluegrass	*Poa secunda* ssp. *secunda*

Note: This is a list of potential recommended plants based on on-site floristic composition. Other species may be found suitable based on site conditions and state and federal permits.

MM 4.2-5 Temporary irrigation shall be installed as necessary for plant establishment. Irrigation shall continue as needed until the restoration site becomes self-sustaining regarding survivorship and growth. Irrigation shall be terminated in the fall to provide the least stress to plants.

MM 4.2-6 All native riparian trees with a 3 inch dbh or greater in temporary construction areas shall be replaced using 1 or 5 gallon container plants, containered trees, or pole cuttings in the temporary construction areas in the winter following the construction disturbance. The growth and survival of the replacement trees shall meet the performance standards specified in **MM 4.2-1**. In addition, the growth and survival of the planted trees shall be monitored until they meet the self-sustaining success criteria in accordance with the methods and reporting procedures specified in **MM 4.2-1**, and **MM 4.2-1**.

MM 4.2-7 In order to reduce impacts to biological resources from grading and construction activities, all related activities will be conducted to facilitate the escape of animals to natural areas. Construction and grading activities will begin in disturbed areas in order to avoid stranding animals in isolated patches of vegetation type. Trenches will be covered at night to prevent animals from falling into and being trapped in trenches.

MM 4.2-8 Within 30 days of ground-disturbing activities associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March through August in the project region, or as determined by a qualified biologist), the applicant shall have weekly surveys conducted

by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act or the California Fish and Game Code are present in the disturbance zone or within 300 feet (500 feet for raptors) of the disturbance zone. The surveys shall continue on a weekly basis, with the last survey being conducted no more than three days prior to initiation of disturbance work. If ground-disturbing activities are delayed, then additional pre-disturbance surveys shall be conducted so that no more than three days will have elapsed between the survey and ground-disturbing activities.

If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist in consultation with CDFG, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests occur.

MM 4.2-9 A Slender Mariposa Lily Mitigation and Monitoring Plan shall be submitted to CDFG for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The plan will demonstrate the feasibility of enhancing or restoring slender mariposa lily habitat in selected areas to be managed as natural open space without conflicting with other resource management objectives. Habitat enhancement or replacement will be at a 1:1 ratio (acres enhanced or restored: acres impacted).

The plan will specify methods to collect propagules and introduce slender mariposa lily into these mitigation sites. Introductions will use source material (seeds or bulbs) from slender mariposa lily occurrences to be lost. The applicant or its designee will monitor the reintroduction sites for no fewer than five additional years to estimate slender mariposa lily survivorship (for bulbs) or seedling establishment (for seeded sites).

Annual monitoring reports will be prepared and submitted to CDFG and will be made available to the public to guide future mitigation planning for slender mariposa lily. Monitoring reports will describe all enhancement or restoration measures taken in the preceding year; describe success and completion of those efforts and other pertinent site

conditions (erosion, trespass, animal damage) in qualitative terms; and describe mariposa lily survival or establishment in quantitative terms.

MM 4.2-10 Prior to issuance of a grading permit, an Oak tree report shall be prepared and approved. All oaks that will not be removed that are regulated under the City of Santa Clarita's Oak Tree Preservation and Protection Guidelines with driplines within 50 feet of land clearing (including brush clearing) or areas to be graded shall be enclosed in a temporary fenced zone for the duration of the clearing or grading activities. Fencing shall extend to the root protection zone (*i.e.*, the area at least 15 feet from the trunk or 5 feet beyond the drip line, whichever distance is greater). No parking or storage of equipment, solvents, or chemicals that could adversely affect the trees shall be allowed within 25 feet of the trunk at any time. Removal of the fence shall occur only after the project arborist or qualified biologist confirms the health of preserved trees.

MM 4.2-11 Prior to the issuance of a grading permit for ground disturbance, construction, or site preparation activities, the applicant shall retain the services of a qualified biologist to conduct pre-construction surveys for western spadefoot within the vernal pool and all other portions of the project site containing suitable breeding habitat. Surveys shall be conducted during a time of year when the species can be detected (*i.e.*, when the vernal pool is inundated).

1. Under the direct supervision of the qualified biologist, western spadefoot habitat shall be created within suitable natural sites on the project site outside of the proposed development envelope. The amount of occupied breeding habitat to be impacted by the project shall be replaced at a 1:1 ratio. The actual relocation site design and location shall be approved by CDFG. The location shall be in a suitable habitat as far away as feasible from the impacted area. The relocation ponds shall be designed so that they only support standing water for several weeks following seasonal rains, in order that aquatic predators (*e.g.*, fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing ponds as feasible. No site preparation or construction activities shall be permitted in the vicinity of the currently occupied ponds until the design and construction of the pool habitat in preserved areas of the site has been completed and all western spadefoot adult, tadpoles, and egg masses detected are moved to the created pool habitat.

2. Based on appropriate rainfall and temperatures, generally between the months of February and April, the biologist shall conduct pre-construction surveys in all appropriate vegetation types within the development envelope. Surveys will include evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas of the site. All western spadefoot adults,

tadpoles, and egg masses encountered shall be collected and released in identified or created relocation ponds described above.

3. The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately following peak breeding season so that surveys can be conducted for adults as well as for egg masses and larval and post-larval toads. Further, survey data will be provided to CDFG by the monitoring biologist following each monitoring period and a written report summarizing the monitoring results will be provided to CDFG at the end of the monitoring effort. Success criteria for the monitoring program shall include verifiable evidence of toad reproduction at the relocation site.

MM 4.2-12 Prior to project construction, the applicant shall develop a relocation plan for coast horned lizard, silvery legless lizard, coastal whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake. The plan shall include but not be limited to the timing and location of the surveys that would be conducted for each species; identification of the locations where more intensive efforts should be conducted; identification of the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating the individual species; and shall provide for the documentation/recordation of the species and number of the animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground disturbing activities within potentially occupied habitat.

The plan shall include the specific survey and relocation efforts that would occur for construction activities that occur both during the activity period of the special-status species (generally March to November) and for periods when the species may be present in the work area but difficult to detect due to weather conditions (generally December through February). Thirty days prior to construction activities in coastal scrub, chaparral, riparian habitats, or other areas supporting these species, qualified biologists shall conduct surveys to capture and relocate individual coast horned lizard, silvery legless lizard, coastal whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake in order to avoid or minimize take of these special-status species. The plan shall require a minimum of three surveys conducted during the time of year/day when each species is most likely to be observed. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. If construction is scheduled to occur during the low-activity period (generally December through February) the surveys shall be conducted prior to this period if possible, and exclusion fencing shall be placed to limit the potential for re-colonization of the site prior to construction. The qualified biologist will be present during ground-disturbing activities immediately adjacent to or within

habitat that supports populations of these species. Clearance surveys for special-status reptiles shall be conducted by a qualified biologist prior to the initiation of construction each day.

MM 4.2-13 Thirty days prior to construction activities, a qualified biologist shall conduct CDFG protocol surveys to determine whether burrowing owl is present at the site. The surveys shall consist of three site visits and shall be conducted in areas dominated by disturbed habitat and grasslands, or if such habitats occur within 500 feet of a construction zone. If located, occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls are detected but nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFG-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (10-17-95).

Unless otherwise authorized by CDFG, a 500-foot buffer, within which no activity will be permissible, will be maintained between project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until August 31 or at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.

MM 4.2-14 No earlier than 30 days prior to the commencement of construction activities, a pre-construction survey shall be conducted by a qualified biologist to determine if active roosts of special-status bats are present on or within 300 feet of the project disturbance boundaries. Should an active maternity roost be identified (in California, the breeding season of native bat species is generally from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, until the roost is vacated and juveniles have fledged. Surveys shall include rocky outcrops, caves, structures, and large trees (particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities). Trees and rocky outcrops shall be surveyed by a qualified bat biologist (*i.e.*, a biologist holding a CDFG collection permit and a Memorandum of Understanding with CDFG allowing the biologist to handle bats). If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied by the roost shall be avoided (*i.e.*, not removed) by the project. If avoidance of the maternity

roost must occur, the bat biologist shall survey (through the use of radio telemetry or other CDFG approved methods) for nearby alternative maternity colony sites. If the bat biologist determines in consultation with and with the approval of CDFG that there are alternative roost sites used by the maternity colony and young are not present then no further action is required.

If a maternity roost will be impacted by the project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the project site no less than three months prior to the eviction of the colony. Large concrete walls (*e.g.*, on bridges) on south or southwestern slopes that are retrofitted with slots and cavities are an example of structures that may provide alternative potential roosting habitat appropriate for maternity colonies. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. CDFG shall also be notified of any hibernacula or active nurseries within the construction zone.

If non-breeding bat hibernacula are found in trees scheduled to be removed or in crevices in rock outcrops within the grading footprint, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (*e.g.*, installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost because bats do not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist in consultation with CDFG shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (*i.e.*, there shall be no less or more than one night between initial disturbance and the grading or tree removal). These actions should allow bats to leave during nighttime hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight.

If an active maternity roost is located on the project site, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to March 1) or after young are flying (i.e., after July 31) using the exclusion techniques described above.

MM 4.2-15 Any special-status species bat day roost sites found by a qualified biologist during pre-construction surveys conducted per **MM 4.2-19** to be directly (within project disturbance footprint) or indirectly (within 300 feet of project disturbance footprint) impacted are to be mitigated with creation of artificial roost sites. The project applicant shall establish (an) alternative roost site(s) within suitable preserved open space located at an adequate distance from sources of human disturbance.

MM 4.2-16 Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for San Diego black-tailed jackrabbit and San Diego desert woodrat.

If San Diego black-tailed jackrabbits are present, non-breeding rabbits shall be flushed from areas to be disturbed. Dens, depressions, nests, or burrows occupied by pups shall be flagged and ground-disturbing activities avoided within a minimum of 200 feet during the pup-rearing season (February 15 through July 1). This buffer may be reduced based on the location of the den upon consultation with CDFG. Occupied maternity dens, depressions, nests, or burrows shall be flagged for avoidance, and a biological monitor shall be present during construction. If unattended young are discovered, they shall be relocated to suitable habitat by a qualified biologist. The applicant shall document all San Diego black-tailed jackrabbit identified, avoided, or moved and provide a written report to CDFG within 72 hours. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

If active San Diego desert woodrat nests (stick houses) are identified within the disturbance zone or within 100 feet of the disturbance zone, a fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of the qualified biologist in consultation with CDFG. Clearing and construction within the fenced area will be postponed or halted until young have left the nest. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts to these nests will occur. If avoidance is not possible, the applicant will take the following sequential steps: (1) All understory vegetation type will be cleared in the area immediately surrounding active nests followed by a period of one night without further disturbance to allow woodrats to vacate the nest, (2) Each occupied nest will then be disturbed by a qualified wildlife biologist until all woodrats leave the nest and seek

refuge off site, and (3) The nest sticks shall be removed from the project site and piled at the base of a nearby hardwood tree (preferably a coast live oak or California walnut). Relocated nests shall not be spaced closer than 100 feet apart, unless a qualified wildlife biologist has determined that a specific habitat can support a higher density of nests. The applicant shall document all woodrat nests moved and provide a written report to CDFG.

All woodrat relocation shall be conducted by a qualified biologist in possession of a scientific collecting permit.

MM 4.2-17 Thirty days prior to construction activities in suitable habitat, a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for American badger.

If American badgers are present, occupied habitat shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during the pup-rearing season (February 15 through July 1) and a minimum 200 foot buffer established. This buffer may be reduced based on the location of the den upon consultation with CDFG. Maternity dens shall be flagged for avoidance, identified on construction maps, and a qualified biologist shall be present during construction. If avoidance of a non-maternity den is not feasible, badgers shall be relocated either by trapping or by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (February 15 through July 1). Any relocation of badgers shall occur only after consultation with CDFG. A written report documenting the badger removal shall be provided to CDFG within 30 days of relocation.

Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

MM 4.2-18 All lighting along the perimeter of natural areas shall be downcast luminaries with light patterns directed away from natural areas.

MM 4.2-19 Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and Fuel Modification Zone areas within 100 feet of native vegetation types shall be reviewed by a qualified restoration specialist to ensure that the proposed landscape plants will not naturalize and require maintenance or cause

vegetation type degradation in the open space areas (River Corridor SMA, High Country SMA, Salt Creek area, and natural portions of the Open Area). Container plants to be installed within public areas within 100 feet of the open space areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants within 100 feet of native vegetation types shall not be on the Cal-IPC California Invasive Plant Inventory (most recent version) or on the list of Invasive Ornamental Plants listed in Appendix B of the SCP. The current Cal-IPC list can be obtained from the Cal-IPC web site (http://www.cal-ipc.org/ip/inventory/index.php). Landscape plans will include a plant palette composed of native or non-native, non-invasive species that do not require high irrigation rates. Except as required for fuel modification, irrigation of perimeter landscaping shall be limited to temporary irrigation (*i.e.*, until plants become established).

CUMULATIVE IMPACTS

Buildout of the Via Princessa Extension project would permanently convert acreage from a mostly undeveloped property to that of an urban infrastructure environment. Cumulative impacts related to development of the project site would include reducing total vegetation and wildlife habitat area and open area in the Santa Clarita Valley region.

Construction and operation of uses developed on site would directly impact wildlife on and near the Via Princessa Extension project site. Within the planned construction areas, species of low mobility would be lost during site preparation. Conversion of existing undeveloped land to developed infrastructure uses and landscaping would eliminate some natural vegetation communities on the project site and result in a reduction in native wildlife species diversity. Project implementation within the project site would limit the local movement of wildlife species that currently make use of this area.

Other related "cumulative" projects besides the Via Princessa Extension project are described below. The impacts likely to be associated with these projects are identified. The potential for these impacts to combine with similar impacts due to the proposed project is also evaluated. This list of projects is not intended to include all projects that exist in the project region. Instead, the analysis focuses on those projects that support or would potentially affect similar vegetation communities, jurisdictional resources, and special-status plant and animal species that occur on the Via Princessa Extension project site. The analysis also focuses on those related projects that would likely be constructed during the same time frame as Via Princessa Extension.

Cumulative Impact Analysis Study Area

Under the *State CEQA Guidelines* (Cal. Code Regs., tit. 14, Section 15130, subd. (b)(3)), the lead agency should provide a reasonable explanation of the geographic limitation used in the cumulative impacts analysis. In addition, the "discussion of cumulative impacts must reflect the severity of the impacts and their likelihood of occurrence, but, the discussion need not provide as great detail as is provided for the effects attributable to the project alone." (Cal. Code Reg. tit. 14, Section 15130, subd. (b).) As permitted under section 15130, subdivisions (b)(1)(A) and (B), there are two methods for adequately discussing significant cumulative impacts of a project in combination with other cumulative projects. The two methods are: "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) A summary of projections contained in an adopted general plan or related planning document,…which described or evaluated regional or area wide conditions contributing to the cumulative impact." (Cal. Code Reg. tit. 14, Section 15130, subds. (b)(1)(A) and (B).)

This EIR has used a combination of both the "list" and the "plan" methods of discussing significant cumulative impacts associated with the proposed project. The list method has focused on related cumulative projects within both the City of Santa Clarita and the unincorporated area of the County of Los Angeles. This area is considered reasonable for a project the size of the Via Princessa Extension because it encompasses a geographic area that includes both incorporated and unincorporated areas within 12 miles of the project. This area is considered reasonably broad to encompass cumulative development within the overall project vicinity.

In addition, because the list approach provides project-specific location, size, and acreage data, but does not necessarily specify the cumulative project impacts to sensitive biological resources, this EIR has relied on a watershed plan that has assessed the cumulative impacts of development on biological resources, as well as ecological functions and processes, within the Santa Clara River Watershed (SCRW or watershed). Specifically, this EIR's cumulative impacts assessment has utilized the *Santa Clara River Watershed Study* (*Watershed Study*), as copy of which is provided in **Appendix 4.2** of this Draft EIR. The *Watershed Study* utilized more extensive lists of past, present, and reasonably foreseeable cumulative projects within the SCRW than is shown on the lists of City/County projects cited in this EIR. As a result, the *Watershed Study* is necessarily a broader cumulative impacts assessment on biological resources in both the project vicinity and the region.

Cumulative Projects

City of Santa Clarita Cumulative Projects

Table 4.2-7 contains the list of cumulative projects within the City of Santa Clarita relative to the project site. As with the County list below, the cumulative projects that fall in a geographic area within 12 miles of the vicinity of the Via Princessa Extension proposed project.

Unincorporated Los Angeles County Cumulative Projects

Table 4.2-8 contains the list of cumulative projects within the Los Angeles County relative to the project site. Cumulative projects in a geographic area within 12 miles of the Via Princessa Extension vicinity are shown in this table.

Table 4.2-7
City of Santa Clarita Cumulative Projects

Name	Location	Units	Commercial/ Industrial (sf)	Acres[1]	Status
Residential/Mixed Use Projects					
Golden Valley Ranch (TR 52414)	Newly annexed development area southeast of SR-14 and north of Placerita Canyon Road; approximately 1 mile south and west of the proposed project.	498	618,759	1,259 (974 open space)	Approved 2002; Commercial Center substantially complete and in operation, residential development not yet started
Whittaker Bermite /Porta Bella Project (TR 51599)	Map ID #8 - West of Golden Valley Road, south of Soledad Canyon Road, and east of San Fernando Road; approximately 5 miles west of the proposed project.	2,911	609,832	996 (407 open space)	On Hold Pending Remediation Activities
Riverpark (TR 53425)	Map ID #12 - Located at the eastern terminus of Newhall Ranch Road, east of Bouquet Canyon Road, and north of Soledad Canyon Road and the Santa Clara River; approximately 5 miles west of the proposed project.	1,089	16,000	695	Under Construction

Name	Location	Units	Commercial/ Industrial (sf)	Acres[1]	Status
Residential/Mixed Use Projects (continued)					
North Valencia Specific Plan No. II (MC 04-205)	Along the east side of San Francisquito Creek, north of Newhall Ranch Road, south of Decoro Drive, east of Rye Canyon Road, and west of McBean Parkway; approximately 7 miles west of the proposed project.	1,900	210,000	596	Project is completely built out
Keystone/Synergy Project (TR 60258)	South of Bouquet Canyon Road, adjacent to the RiverPark project; approximately 5 miles west of the proposed project.	499	30,476	246 (137 open space)	Approved 2006 Development has not started
Downtown Newhall Specific Plan	Redevelopment of downtown Newhall area (along San Fernando Road); approximately 4 miles southwest of the proposed project.	1,092	1,017,000	320	Approved
Stetson Ranch (TR 49621)	East of Sand Canyon Road at the northern terminus of Gary and Marilyn Drives; approximately 1 mile north of the proposed project.	265	0	176	Approved and largely built out
Sand Canyon Joint Venture (TT 53255, 53074)	The northeast corner of Soledad Canyon Road and Sand Canyon Road; approximately 0.5 mile north of the proposed project.	87	110,000	89	Approved; development has not yet started
DR Horton (TR 48892)	Northeast corner of Sierra Highway and Golden Valley Road; approximately 2 miles west of the proposed project.	148	0	61	Approved and built out
Centex Homes (TR 61811)	Located north of Golden Valley Road, west of Sierra Highway; approximately 2 miles west of the proposed project.	52	0	14	Approved and built
Soledad Village Project (MC 04-444)	North of Soledad Canyon Road, south of Santa Clara River; approximately 1 mile east of Bouquet Canyon Road; approximately 5 miles west of the proposed project.	407	8,000	30	Approved 2006
Friendly Valley Association 11 (TR 52385)	Generally located north of Sierra Highway and east of Via Princessa; approximately 2 miles west of the proposed project.	43	0	22	Proposed
Soledad Circle Estates	South of Soledad Canyon Road at Penlon Court; approximately 3 miles west of the proposed project.	147	0	20	Approved

Name	Location	Units	Commercial/ Industrial (sf)	Acres[1]	Status
Residential/Mixed Use Projects (continued)					
Vista Canyon Ranch • General Plan Amendment No. 07-001a; • Pre Zone No.07-001a; • Annexation No. 07-002a (including an amendment to the City's Sphere of Influence); • Specific Plan No. 07-001; • Tentative Tract Map No. 69164; • Conditional Use Permit No. 07-009; • Oak Tree Permit No. 07-019	Immediately south of State Route 14 (SR-14), west of La Veda Avenue, north of the Metrolink rail line, and east of the Colony Townhome community. The site also includes a portion of the Santa Clara River.	1,117 (96 single-family residential lots and 1,021 attached condominiums)	950,000	185	Pending
Total Santa Clarita Residential/Mixed Use		**10,928**	**4,230,567**	**4,922**	**n/a**
Commercial/Industrial Projects					
Rye Canyon Business Park (TR 23916, 51826)	At the northeast corner of Rye Canyon Road and Newhall Ranch Road; approximately 8 miles northwest of the proposed project.	0	4,400,000	376	Mostly built out
Gate King (TR 50283)	Southern Santa Clarita, west of SR-14 and Sierra Highway, south of San Fernando Road; approximately 5 miles south of the proposed Project.	0	4,200,000	682	Approved
Centre Pointe Business Park (TR 42670)	South of Soledad Canyon road, east of Bouquet Canyon Road, west of Golden Valley Road; approximately 3 miles southwest of the proposed project.	0	2,300,000	45	Near buildout
North Valencia Specific Plan No. I	Map ID #11 - South of Newhall Ranch Road, north of Magic Mountain Parkway, east of Rye Canyon Road, west of Bouquet Canyon Road; approximately 6 miles west of the proposed project.	2,000	803,000	707 (365 open space)	Built out
Valencia Town Center Expansion	Northeast corner of Valencia Boulevard and McBean Parkway; approximately 7 miles west of the proposed project.	0	491,860	10	Built out

Name	Location	Units	Commercial/ Industrial (sf)	Acres[1]	Status
Commercial/Industrial Projects (continued)					
Bridgeport Market Place	Northeast corner of McBean Parkway and Newhall Ranch Road; approximately 6 miles west of the proposed project.	0	160,000	32	Built out
Henry Mayo Newhall Memorial Master Plan (MC 04-325)	23845 West McBean Parkway; approximately 7 miles west of the proposed project	0	600,000	21	Under construction
Tourney North	Magic Mountain Parkway west of The Old Road and I-5; approximately 8 miles west of the proposed project.	0	450,000	100	Built out
Tourney South	Wayne Mills Place east of I-5; approximately 8 miles west of the proposed project.	0	165,000	12	Built out
Chinque Terra Office Park	On Sierra Highway between Dockweiler Drive and San Fernando Road; approximately 4 miles south of the proposed project.	0	90,900	6	Pending
Facey Medical Building	26357 McBean Parkway; 7 miles west of the proposed project.	0	79,000	4	Completed
HH Seco II LLC (MC 01-317)	Southwest corner of Seco Canyon Road and Copperhill Drive; approximately 8 miles northeast of the proposed project.	0	40,000	2	Completed
VTC Square	Northwest corner of McBean Parkway and Valencia Boulevard; approximately 7 miles west of the proposed project.	10	37,000	1	Approved
Rodgers Development Master Case 02-232	Northeast corner of Bouquet Canyon Road and Plum Canyon Road; approximately 6 miles northeast of the proposed project.	0	34,000	4	Completed
Total Santa Clarita Commercial/Industrial		**2,010**	**13,850,760**	**2,002**	
Institutional Projects					
College of the Canyons Expansion	South of Valencia Boulevard and west of Rockwell Canyon Road; approximately 7 miles west of the proposed project	n/a	180,000	5	Completed
Master's College Master Plan and TM 66503	21726 Placerita Canyon Road; approximately 3 miles west of the proposed project.	42	0	95	Approved

Name	Location	Units	Commercial/ Industrial (sf)	Acres[1]	Status
Institutional Projects (continued)					
UCLA Film Archives	North of McBean Parkway and west of Rockwell Canyon Road; approximately 7 miles west of the proposed project.	n/a	368,730	65	Approved, under construction
Total Santa Clarita Institutional		**54**	**548,730**	**165**	
Infrastructure Projects					
Wiley Canyon Road/Via Princessa Bridge (South fork)	1,100-foot bridge, crosses South Fork of Santa Clara River in the City of Santa Clarita; approximately 4 miles west of the proposed project.	n/a	n/a	n/a	Built
Saugus Water Reclamation Plant	Near Bouquet Canyon Road, discharges to Santa Clara River; approximately 3 miles east of the proposed RMDP/SCP project.	n/a	n/a	n/a	Completed
Total Santa Clarita Infrastructure Subtotal		**n/a**	**n/a**	**n/a**	
Grand Total/Santa Clarita		**12,992**	**18,630,057**	**5,279**	

[1] *Open space acreage information was not available for all projects, but is provided where available.*
Source: City of Santa Clarita.

Table 4.2-8
Los Angeles County Cumulative Projects

Name	Location	Units	Commercial/ Industrial (sf)[1]	Acres[2]	Status
Residential/Mixed Use Projects					
Lyons Ranch (TR 53653)	West of I-5 and south of Pico Canyon Road; approximately 8 miles west of the proposed project.	186	800	235	Approved; development has not started
Fair Oaks Ranch (TR 47200, 52833, 52938)	East of SR-14, northeast of Via Princessa, and west of Sand Canyon Road; approximately 0.25 mile south of the proposed project.	1,476	19 acres [827,640 sf]	839 (497 open space)	Under construction-mostly developed
Stevenson Ranch Phase IV (PD #2528; TR 52796, 43896)	West of I-5 and southwest of Magic Mountain Parkway; approximately 9 miles west of the proposed project	1,130	0	488 (113 open space, not including open space in Phase V)	Stephenson Ranch is partially built; Phase IV is pending

Name	Location	Units	Commercial/ Industrial (sf)[1]	Acres[2]	Status
Residential/Mixed Use Projects(continued)					
Plum Canyon (TR 46018)	East of Bouquet Canyon Road and north of the northern terminus of Whites Canyon Road; approximately 3 miles northwest of the proposed project.	4,051	150,000	603	Under construction
Skyline Ranch (TR 060922)	East of Whites Canyon Road, west of Sierra Highway; approximately 2 miles north of the proposed project.	1,325	0	2,196 (1,604 open space)	Approved
Plum Canyon (SunCal) (TR 31803)	South of Plum Canyon Road, east of Bouquet Canyon Road; approximately 4 miles west of the proposed project.	499	0	209 (90 open space)	Built out
Legacy Village (formerly Stevenson Ranch V)	Map ID #5 - approximately 9 miles west of the proposed project.	3,425	840,200	1,759	Pre-application
Tesoro del Valle (TR 51644)	Map ID #6 - West side of San Francisquito Creek, north of Copperhill Drive; approximately 7 miles northwest of the proposed project.	1,791	0	1,793	Phase I built out
West Creek/West Hills Valencia Project (TR 52445)	Map ID #9 - West side of San Francisquito Creek, north of Newhall Ranch Road and south of the Copperhill Drive bridge; approximately 7 miles northwest of the proposed project.	2,545	180,000	966	Under construction
Westridge Project (TR 45433 & MP 19050)	Map ID #10 - Just west of I-5, north of Stevenson Ranch, and directly south of Six Flags Magic Mountain Amusement Park; approximately 9 miles west of the proposed project.	1,939	192,000	794	Built out
Northlake (TR 51852)	Near Castaic Lake; approximately 12 miles northwest of the proposed project	1,698	388,775	1,330 (312 open space)	Approved
Tapia Ranch (TR 53822)	Map ID #7 - Tapia Canyon Road, west of Tesoro Residential Development. Access to the site currently *via* Parker Road exit from I-5; approximately 9 miles northwest of the proposed project.	405	0	1167	Pending

Name	Location	Units	Commercial/ Industrial (sf)[1]	Acres[2]	Status
Residential/Mixed Use Projects(continued)					
Spring Canyon (TR 48086)	East of the City of Santa Clarita boundary, south of Sierra Highway, north of SR-14 and Soledad Canyon Road; approximately 2 miles northeast of the proposed project.	542	0	548 (279 open space)	Approved
Bee Canyon (TR 54020)	East of the City of Santa Clarita boundary, south of SR-14; approximately 2 miles northeast of the proposed project.	556	0	211 (76 open space)	On hold
Tick Canyon/Park Place (TR 060259)	Along Shadow Pines Boulevard just east of the City of Santa Clarita boundary, north of Stonecrest Annexation area and SR-14; approximately 2 miles northeast of the proposed project.	492	0	523 (272 open space)	Approved
Hasley Golf Course (TR 52584)	North of Hasley Canyon Road, west of I-5; approximately 12 miles northwest of the proposed project.	209	0	438	Approved-graded
Meadow Peak Project (TT 47760)	South of the Angeles National Forest, north of the City of Santa Clarita boundary, and northeast of the intersection of Copperhill Drive and Haskell Canyon Road; approximately 5 miles northwest of the proposed project.	495	0	454	Pending
Tincher (TR 060319)	Located at The Old Road and Villa Canyon Road; approximately 11 miles northwest of the proposed project.	36	0	8	Approved
G. H. Palmer and Associates (TR 45023)	North of Fair Oaks Ranch, east of SR-14; directly west of the proposed project.	752	0	8	Built
North Park (TR 46389)	West of Seco Canyon Road, east of McBean Parkway, north of Decoro Drive; approximately 7 miles northwest of the proposed project.	744	0	350	Built
Pacific Bay Homes (TR 36943)	East of the City of Santa Clarita boundary and Stonecrest Annexation area, north of Highway 14; approximately 9 miles northwest of the proposed project.	636	0	213	Built

Name	Location	Units	Commercial/ Industrial (sf)[1]	Acres[2]	Status
Residential/Mixed Use Projects(continued)					
Stevenson Ranch III (TR 33608)	North of Pico Canyon Road, west of The Old Road; approximately 9 miles west of the proposed project.	972	0	112	Built out
Fair Oaks Ranch (TR 44492)	East of Sierra Highway, north of Via Princessa; approximately 0.25 mile south of the proposed project.	634	0	37	Built out
Centex Homes Bouquet Canyon (TR 46908)	South of the Angeles National Forest, north of Copperhill Drive, west of the Meadow Peak project; approximately 5 miles northwest of the proposed project.	594	0	381	Built out
Ion Communities, Castaic (Tract 46443)	West of I-5 in Castaic; approximately 12 miles northwest of the proposed project.	95	0	159	Approved
Curtis Development Corporation (TR 47657)	North of Haskell Canyon Road and Copperhill Drive; approximately 5 miles northwest of the proposed project.	223	0	63	Built out
G. H. Palmer and Associates (TR 45287)	On Sandy Drive and Jakes Way, between Sierra Highway and SR-14, south of the Santa Clara River; approximately 0.5 mile west of the proposed project.	463	0	23	Built out
Davidon Homes (TR 35783)	North of Copperhill Drive and east of Seco Canyon Road; approximately 5 miles northwest of the proposed project.	419	0	149	Built out
Green Valley Ranch Residential (TR 62000, 60257, and 062275)	Located south of Del Valle Road near Cromwell Avenue. The property is located approximately 0.5 mile west of the intersection of Hasley Canyon Road and Del Valle Road, and approximately 1.5 miles north of SR-126; approximately 13 miles west from the proposed project.	233	30,000	224	Pending
Newhall Land (TR 44429)	Along Ridge Route Road, east of I-5 in Castaic; approximately 12 miles northwest of the proposed project	293	0	113	Built out
Valencia Company (TR 48202)	Northeast corner of Decoro Drive and Copperhill Drive; approximately 7 miles northwest of the proposed project.	458	3.5 acres [152,460 sf]	9	Built out

Name	Location	Units	Commercial/ Industrial (sf)[1]	Acres[2]	Status
Residential/Mixed Use Projects(continued)					
Valencia Company (TR 45084)	Corner of Commerce Center Drive and Hasley Canyon Road; approximately 12 miles northwest of the proposed project.	294	0	150	Built out
Valencia Company (TR 36668)	West of The Old Road, north of Commerce Center Drive; approximately 12 miles northwest of the proposed project.	359	one lot	134	Built out
Curtis Development Corporation (TR 45958)	West of I-5 in Castaic; approximately 12 miles northwest of the proposed project.	296	0	357	Built out
Gerald Nordeman (TR 44373)	Along Hillcrest Parkway, west of I-5, north of Hasley Golf Course; approximately 12 miles west of the proposed project.	1,114	4 acres [174,240 sf]	376	Built out
Davidon Homes (TR 46183)	West of Haskell Canyon Road, north of Copperhill Drive; approximately 5 miles northwest of the proposed project.	213	0	80	Built out
Forest Edge Project (Western Pacific Housing, TR 51789)	West of Haskell Canyon Road, north of Copperhill Drive; approximately 6 miles northwest of the proposed project.	194	0	79 (30 open space)	Built out
Bouquet Canyon Land Fund 8, LLC (TR 52193)	Located west of Bouquet Canyon Road near the intersection of Bouquet and Vasquez Canyon Road; approximately 5 miles northwest of the proposed project.	179	20,000	260	Pending
Westshire (Pardee Homes, TR 063483)	Located immediately south of SR-14, southwest of Via Princessa and north of Lost Canyon Road; approximately 0.5 mile southwest of the proposed project.	190	0	13 (3 open space)	Approved
Overland National Land Fund (TR 52192)	Southwest of the intersection of Bouquet Canyon Road and Vasquez Canyon Road; approximately 5 miles northwest of the proposed project.	155	0	204	Pending
Condo III Development, Larwin Company, Val Verde (TR 51995)	West of I-5, south of Hillcrest Parkway; approximately 11 miles northwest of the proposed project.	114	0	15	Built out

Name	Location	Units	Commercial/ Industrial (sf)[1]	Acres[2]	Status
Residential/Mixed Use Projects(continued)					
Forecast Homes (TR 46353)	Located in Mint Canyon just southeast of Sierra Highway and west of Sand Canyon Road, just north of the City of Santa Clarita boundary; approximately 2 miles north of the proposed project.	110	0	65	Built out
Golden Valley Ranch (TR 52535)	West of I-5 in Castaic; approximately 12 miles northwest of the proposed project.	80	0	260	Pending
Decoro Drive Residential (TR 45440)	West of McBean, east of San Francisquito Creek; approximately 6 miles northwest of the proposed project.	182	0	99	Built out
(PM 19784)	West of Commerce Center Drive, north of SR-126; approximately 0.25 mile northwest of the proposed project.	0	750,000	288	Built out
(TR 42537)	West of I-5 in Castaic; approximately 11 miles northwest of the proposed project.	95	0	553	Built out
Sierra Way Estates (TR 47573)	Located northeast of the intersection of Sierra Highway and Vasquez Canyon Road; approximately 3 miles northwest of the proposed project.	75	0	246 (179 open space)	Pending
(TR 47807)	West of Sloan Canyon Road and I-5 in Castaic; approximately 12 miles northwest of the proposed project.	77	0	197	Approved
SunCal Burnam Project (TR 53189)	Along San Francisquito Creek, west of McBean Parkway and north of Copperhill Drive; approximately 7 miles northwest of the proposed project.	40	0	186	Approved
Hasley Ranch Co. Greystone Homes Inc. (TR 45645)	Hasley Canyon Road and Romero Canyon Road, west of the Hasley Canyon Golf Course and I-5; approximately 12 miles northwest of the proposed project.	67	0	160	Built-out
Arciero and Sons, Inc. (TR 53725)	West of Hasley Canyon Golf Course and I-5; approximately 12 miles northwest of the proposed project.	42	0	139	Pending
Del Valle Project (TR 060665)	South of Hasley Canyon Golf Course; approximately 12 miles northwest of the proposed project.	111	0	134	Pending

Name	Location	Units	Commercial/ Industrial (sf)[1]	Acres[2]	Status
Residential/Mixed Use Projects(continued)					
Tract 52475	North of Hasley Canyon Road, west of Del Valle Road, approximately 12 miles northwest of the proposed project.	46	0	70	Pending
Sterling Gateway (TR 60030)	Located east of Chiquita Canyon Road, just north of the RMDP/SCP project area; approximately 12 miles northwest of the proposed project.	0	1,300,000	108	Pending
Newhall Ranch Specific Plan	Located west of I-5 to the Los Angeles County/Ventura County line; approximately 9 miles west of the proposed project.	20,885	5.55 msf	11,999	Approved
Entrada	Located west of I-5, adjacent to The Old Road, northwest of the City of Santa Clarita; approximately 9 miles west of the proposed project.	1,725	0.45 msf	316	Pending
Valencia Commerce Center	Located west of I-5 between Hasley Canyon and SR-126, and immediately north of the Newhall Ranch Specific Plan site; approximately 9 miles west of the proposed project.	0	12.6 msf	321.3	Approved
Newhall Ranch RMDP/SCP	Located west of I-5 to the Los Angeles County/Ventura County line (and including Salt Creek corridor west of the Los Angeles County/Ventura County line); project encompasses Newhall Ranch Specific Plan, and the Entrada and Valencia Commerce Center planning areas; approximately 9 miles west of the proposed project.	n/a (Project facilitates development of Specific Plan, Entrada, and Valencia Commerce Center, shown above. Project also would result in approximately 10,000 acres of open space.)		Pending	
Total Los Angeles County Residential/Mixed Use[3]		**55,959**	**20,000,000**	**33,211.3**	**n/a**
Industrial/Commercial Projects					
(PM 26574)	North of Henry Mayo Drive, west of The Old Road, north of the I-5 and SR-126 interchange; approximately 12 miles west of the proposed project.	0	1,879,500	114	Built out
Valencia Industrial Center	Map ID #4 - East of I-5, south of Newhall Ranch Road, north of Magic Mountain Parkway; approximately 8 miles west of the proposed project.	0	12,900,000	1,840	Built out

Name	Location	Units	Commercial/ Industrial (sf)[1]	Acres[2]	Status
Industrial/Commercial Projects (continued)					
PM 18654	Northwest of The Old Road and Magic Mountain Parkway, near Six Flags Magic Mountain Amusement Park; approximately 9 miles west of the proposed project.	0	200,000	9	Partially built
Curtis Sand and Gravel Mine and Aggregate Plant	Upper Santa Clara River, approximately 1.5 miles east of the proposed project.	0	n/a	185	Operating since 1955
Transit Mix (CEMEX) Soledad Canyon Mine	East of City of Santa Clarita boundary, at the entrance to Soledad Canyon; approximately 3 miles east of the proposed project.	0	n/a	300	Suspended pending federal legislation
Chiquita Canyon Landfill Expansion	Map ID #17 - West of I-5, north of SR-126 at Wolcott Way; approximately 13 mile west of the proposed project.	0	n/a	98	Pending
Disney Ranch	Placerita Canyon Road, east of SR 14, 2 miles south of the proposed project.	0	555,950	890	Pending
Industrial/Commercial Subtotal		**0**	**15,535,450**	**3,436**	
Institutional Projects					
Castaic High School	West of I-5, near Sloan Canyon Road, approximately 12 miles northwest of the proposed project.	0	500,000	50	Pending
Total Los Angeles County Institutional		**0**	**500,000**	**50**	
Infrastructure Projects					
Bouquet Canyon Bridge Widening	Adding one lane in each direction on Bouquet Canyon Bridge at Santa Clara River; approximately 6 miles west of the proposed project.	n/a	n/a	n/a	Completed
Copperhill Drive Bridge	Upper San Francisquito Creek, 565-foot bridge, up to six lanes; approximately 7 miles northwest of the proposed project.	n/a	n/a	n/a	Completed
Commerce Center Drive Extension	Extension of Commerce Center Drive and Bridge over Castaic Creek; approximately 12 miles west of the proposed project.	n/a	n/a	n/a	Completed

Name	Location	Units	Commercial/ Industrial (sf)[1]	Acres[2]	Status
Infrastructure Projects (continued)					
Cross Valley Connector	Two-mile extension of Newhall Ranch Road to east of Bouquet Canyon Road, including approximately 120-foot-wide bridge over Santa Clara River, connecting with Golden Valley Road; approximately 1.5 miles west of the proposed project.	n/a	n/a	n/a	Completed
Santa Clarita Valley Joint Sewerage Facilities Plan	Map ID #16 - Los Angeles County.	n/a	n/a	n/a	Approved
I-5/Hasley Canyon Road	Within Valencia Commerce Center, I-5 at the I-5/Hasley Canyon Road interchange.	n/a	n/a	n/a	
I-5/Magic Mountain Parkway Interchange Project	Modify the I-5/Magic Mountain Parkway interchange, reconstruct the Santa Clara River Bridge, realign The Old Road, and realign and widen Magic Mountain Parkway from six to eight lanes.	n/a	n/a	n/a	Completed
Valencia Water Reclamation Plant	Immediately downstream of the I-5 bridge, discharges to the Santa Clara River.	n/a	n/a	n/a	Completed
I-5 Santa Clara River Bridge Replacement	Santa Clara River and I-5.	n/a	n/a	n/a	Completed
Castaic Junction Project	I-5/SR-126 interchange improvement project; approximately 0.25 mile east of the proposed RMDP/SCP project.	n/a	n/a	n/a	Completed
Total County Infrastructure Subtotal		**n/a**	**n/a**	**n/a**	
Grand Total/County		**55,959**	**19,331,310.9**	**35,807.3**	

Note: The Las Lomas Project (PM 060792) application was denied, and thus, it was not included in this list because it is currently not reasonably foreseeable.

[1] *In some instances, commercial/industrial square footage was not available but acreage for such uses was provided. That acreage was converted to square footage [shown in brackets] to provide an estimated basis for aggregating square footage totals.*

[2] *Open space acreage information was not available for all projects, but is provided where available.*

[3] *Ritter Ranch and Centennial are not included in the totals because they are located in a different watershed.*

Source: Los Angeles County.

Cumulative Projects Overview

Table 4.2-9 contains a summary of the City/County cumulative project information shown in **Tables 4.2-7** and **4.2-8**, above.

Table 4.2-9
Summary of Total City/County Cumulative Projects

Agency	Units	Comm./Ind (sf)[1]	Acres	Open Space Acres[2]
City of Santa Clarita	12,992	18,630,057	5,279	n/a
Los Angeles County	55,959	19,331,310.9	35,807.3	n/a
Total	**68,951**	**37,961,367.9**	**41,080.3**	**12,324 – 20,540.15**

Notes:

[1] *Includes some instances where commercial/industrial acreages were converted to square footage (shown in brackets in **Tables 4.2-6** and **4.2-7** to provide an estimated basis for aggregating square footage totals).*

[2] *Open space acreage information was not available for all projects; therefore, the "Open Space Acres" number represents an estimate of the minimum range of open space acreage within the City/County projects shown in **Tables 4.2-6** and **4.2-7**. The estimate used a range of a low of 30 percent and a high 50 percent in calculating the open space acreage shown in this table.*

*Source: **Tables 4.2-6** and **4.2-7**.*

Cumulative Impacts Analysis on Biological Resources

The *Watershed Study* analyzed the cumulative impacts of development on biological resources, as well as ecological functions and processes, within the Santa Clara River Watershed (SCRW). The study evaluated impacts arising from past projects, current land use classifications, and future approved and planned projects.[17] The *Watershed Study* relied on available data for baseline conditions, current land use classifications, planned and approved projects (only available for the Los Angeles County portion of the watershed[18]), existing vegetation and land use cover types, soils, geology, elevations and slopes, special-status biological resources, and conceptual regional wildlife corridors and habitat linkages in the SCRW.

Baseline data for the analyses presented in the *Watershed Study* were compiled from several data sources:

- Current land use classifications and existing public lands and open space areas based on County and City general plans: UC Davis (2004)
- Watershed and sub-basin data: CalWater Version 2.2 (CIWMC 1999)

17 With respect to future approved and planned projects, the *Watershed Study* conducted a broader analysis of cumulative projects than is presented in this EIR because the *Watershed Study's* framework was to describe and assess existing and potential future development within the entire SCRW.

18 Dudek contacted Ventura County to obtain digital special information for planned and approved projects, but those data were not available from the County.

- Vegetation: California Gap Analysis Project (GAP) (UCSB Biogeography Lab 1999)
- Soils: National Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) database (2007)
- Elevation and slope: US Geological Survey (USGS) National Elevation Data (2007).

For special-status biological resources, California Natural Diversity Database (CNDDB) element occurrences within the SCRW for vegetation communities and state- and/or federally listed Threatened and Endangered species were included. For the analysis of regional wildlife corridors and habitat linkages, two main documents were used: the *South Coast Missing Linkages Project: A Linkage Design for the San Gabriel – Castaic Connection* (SCMLP) (Penrod et al. 2006) and the *Missing Linkages: Restoring Connectivity to the California Landscape* (Penrod 2000).

Existing Conditions

The SCRW drains approximately 1,036,571 acres (or 1,620 square miles) of natural and urban areas that lie north and east of Los Angeles in the counties of Los Angeles, Ventura, Santa Barbara, and Kern. The watershed is divided into 14 sub-basins that range in size from 7,433 to 291,730 acres. Most of the sub-basins are comparatively small, with only three sub-basins having more than 100,000 acres. Of the 1,036,571 total acres, approximately 733,526 acres (70.8 percent)[19] are comprised of open space and 303,045 acres (29.2 percent) are classified as "developed."[20]

The *Watershed Study* identified a total of 40 vegetation and land cover types, which are organized into nine general communities: big sagebrush scrub; coastal scrub; chaparral; non-native grassland; riparian/wetland; woodland and forest; other non-vegetated natural land cover; agricultural land; and, developed and disturbed land. Chaparral, coastal scrub, and woodland and forest comprise 85 percent of the watershed, at 53, 17, and 15 percent, respectively. The watershed is classified as having 19 different geologic types and 27 primary soil types.

Data from the USACE and CDFG gathered in connection with the *Watershed Study* show that, from about 1988 to 2006, there has been a substantial cumulative net gain in mitigated acreage of jurisdictional waters and wetlands relative to impacts. In other words, more jurisdictional waters and wetlands exist today than there were in 1988.

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19 635,172 acres of existing public lands account for approximately 87 percent of the 733,526 acres of classified open space. National Forest land accounts for approximately 95 percent of the 635,172-acre total.

20 Lands classified as "developed" may in fact be vacant; however, the intent is to identify the total acreage of land use designations that permit future development.

Cumulative Impacts

The *Watershed Study* evaluated the impacts of planned and approved projects located within five of the 14 sub-basins in the watershed, all of which are located in Los Angeles County and/or the City of Santa Clarita and total 479,096 acres.[21] Within these five sub-basins, planned and approved projects comprise approximately 9 percent (or 45,106 acres) of the watershed. Of the 45,106-acre area that is impacted by planned and approved projects, 6,686 acres are located within the City of Santa Clarita, 37,971 acres are located with the County of Los Angeles, and 449 acres are located in both jurisdictions. These projects would impact 16 of the 40 distinct vegetation and land cover types identified in the watershed, 14 of the 149 geologic types, and seven of the 27 primary soil types.

Based on evaluation of this data, as more thoroughly explored in the *Watershed Study*, the *Watershed Study* concluded that:

1. The watershed is relatively undeveloped and has substantial existing and designated open space, substantial portions of which will be protected in perpetuity.

2. Biological and physical features of the watershed related to watershed functionality would be retained under current land use classifications because of the extent of open space preservation.

3. Cumulative net increases in and enhancement of jurisdictional wetlands and water are expected in the future.

4. Planned and approved projects in the City of Santa Clarita and County of Los Angeles would increase the amount of development in the watershed by about four percent.

Relying on the information and analysis presented in the Watershed Study, this EIR concludes that build out of the Via Princessa Extension would temporarily and permanently convert acreage from a mostly undeveloped and undisturbed environment to that of an urban environment. Cumulative impacts related to development of the project site would include reducing total vegetation and wildlife habitat area and open area in the Santa Clarita Valley region.

Construction and operation of uses developed on site would directly impact wildlife on and near the Via Princessa Extension site. Within the planned development areas, species of low mobility would be lost during site preparation.

The Via Princessa Extension site mitigates the some of the project's identified impacts to sensitive biological resources to a less than significant level; and, therefore, would not result in cumulatively considerable impacts to these resources within the region based on the watershed analysis presented in

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21 The five sub-basins evaluated include: Acton; Eastern; Mint Canyon; Santa Felicia; and, Sierra Pelona.

the *Watershed Study*. Specifically, the Via Princessa Extension site constitutes a very small proportion of the overall watershed and planned development on site would not significantly contribute to the overall development in the watershed, or to the amount of development allowed under current land use classifications. However, because mitigation is not feasible for impacts to vernal pool habitat and vernal pool-dependent sensitive species, these impacts would remain significant, and considering their regional rarity, impacts to the resources would be cumulatively considerable.

CUMULATIVE MITIGATION MEASURES

The proposed project would result in cumulatively considerable impacts to vernal pool habitat and vernal pool-dependent sensitive species within the project vicinity or watershed. However, since feasible mitigation measures for impacts to these resources have not been identified and since this impact has been determined to be significant on a project-level basis, no additional cumulative mitigation measures are proposed or feasible beyond those already identified in **Mitigation Measures**, above.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the proposed mitigation measures would reduce the majority of direct and indirect project and cumulative impacts to less than significant. Because the project would result in cumulatively considerable impacts to vernal pool habitat and vernal pool-dependent sensitive species in the watershed, and because no feasible mitigation measures have been identified to offset these impacts, cumulative impacts to vernal pool habitat and vernal pool-dependent sensitive species, in addition to project-level impacts, would be significant and unmitigable following project implementation. Mitigation measures mitigating project direct and indirect impacts to sensitive biological resources other than vernal pool and vernal pool dependent species would reduce contributions to project and cumulative impacts to less than significant levels, and no significant project or cumulative impacts to these biological resources are expected with implementation of the proposed project except for the vernal pool habitat and related species.