

## 5.3 BIOLOGICAL RESOURCES

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### SUMMARY

*A total of 18 plant communities were identified and characterized during field investigations of the project site. Two of these communities, coast prickly pear succulent scrub and scalebroom scrub, are considered special-status by the California Department of Fish and Game. In addition, 10 special-status plants and 17 special-status wildlife species were identified as potentially occurring on the site. Four of the potentially occurring special-status plant species are currently listed as Threatened or Endangered by state or federal resource agencies: slender horned spineflower (*Dodecahema leptoceras*), Nevin's barberry (*Berberis nevini*), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), and Braunton's milkoetch (*Astragalus brauntonii*). One potentially occurring special-status animal species is currently listed as federally Threatened: coastal California gnatcatcher (*Polioptila californica californica*). In addition, a total of 388 oak trees under the jurisdiction of the Section 17.17.090, Oak Tree Preservation, of the City of Santa Clarita Unified Development Code (UDC) occur on the site. Newhall Creek flows through the southern portion of the project site, and several ephemeral drainages flow southward toward Newhall Creek on the slopes of the project site.*

*The principal direct impact of implementation of the proposed project is to convert approximately 43.5 acres of the project site (about 40 percent) from an undeveloped to a developed condition. A total net loss of 43.5 acres of wildlife habitat/natural open space as a result of conversion of undeveloped property to a developed condition will occur. Significant impacts would occur to one special-status plant community, coast prickly pear succulent scrub, and 14 potentially occurring special-status wildlife species. Additionally, the project proposes to remove 79 healthy oak trees, work within the dripline of 75 oak trees, and work within the 5-foot protected zone of 22 oak trees, all of which are significant impacts to oak trees on the project site. With the implementation of the mitigation measures in this section, project-level impacts to biological resources would be less than significant. However, the cumulative loss of coastal sage scrub habitat in the Santa Clarita region is considered significant and unavoidable with implementation of this project.*

### INVESTIGATIVE METHODS

#### Literature Review

To identify special-status plant and animal species (those species considered Rare, Threatened, Endangered, or otherwise sensitive by various state and federal resource agencies) that have historically occurred in the vicinity of the project site, the 2006 update of the California Natural Diversity Data Base (CNDDB) as well as the 2006 California Native Plant Society (CNPS) electronic database were reviewed for the USGS 7.5-minute quadrangle on which the project site is located (i.e., Newhall) and the eight

surrounding quadrangles (i.e., Green Valley, Mint Canyon, Oat Mountain, San Fernando, Santa Susana, Val Verde, Warm Springs Mountain, and Whitaker Peak). Other information sources reviewed to determine whether suitable habitat for these special-status species may be available on the project site included (1) the California Wildlife Habitat Relationships System life history accounts for special status species (CDFG 2005); (2) NatureServe's Explorer database of rare and endangered species (2006); (3) California Department of Fish and Game Species Accounts (CDFG 2006); and (4) Sawyer, Keeler-Wolf (1995), Holland (1986), and Munz (1974) for plant community descriptions occurring within the project vicinity.

## **Field Surveys**

### ***General Biological Survey***

General biological field surveys were conducted by qualified biologists on the project site in November and December of 2006 to inventory observable wildlife, map and characterize on-site habitats (plant communities), and to evaluate the potential of the site to support special-status species. During the general surveys, direct observations of reptiles, birds, and mammal species were recorded, as well as wildlife signs such as scat and tracks. In addition to species actually detected, expected use of the site by various wildlife species was evaluated through analysis of existing on-site habitats and known habitat preferences of locally occurring wildlife species.

Plant communities within the project site were identified, characterized, and mapped with GIS in November of 2006. Vegetation nomenclature used to describe plant communities is primarily based on the CDFG's *List of California Terrestrial Natural Communities* (CDFG 2003), but also on Sawyer, Keeler-Wolf (1995), and Holland (1986), where applicable. Common plant names are taken from J.C. Hickman (1993) and P.A. Munz (1974).

### ***Focused Plant Survey***

The potential for special-status plant species to occur on the project site was determined based on the proximity of the site to recorded occurrences listed in the CNDDDB and CNPS databases, on-site vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences, and geographic ranges of special-status plant species known to occur in the region.

On April 24, 2007, Impact Sciences' biologists conducted focused special-status plant surveys, with an emphasis on identifying whether any of the ten special-status plants with the potential to occur on the site are present on the subject property. The surveys were performed under clear skies, with temperatures ranging from 60 to 75 degrees Fahrenheit. The site was surveyed by walking transects with

special attention to those habitats that would support the special-status plants with potential to occur in the project vicinity.

### ***Focused Coastal California Gnatcatcher Survey***

David Crawford of Compliance Biology, Inc., conducted focused surveys for the coastal California gnatcatcher under the authority of his individual Endangered Species Recovery Permit. Based on US Fish and Wildlife Service survey guidelines, six focused surveys were conducted within and adjacent to potentially suitable on-site coastal scrub and buffer habitats with at least a seven-day interval between surveys. Surveys were conducted on April 25, May 1, 8, 15, 22, and 29, 2007. All potential habitat areas were systematically surveyed on foot by walking along random transect routes. The location of transects and survey points along each transect were based on the vegetation and topographic conditions (size, location, and shape of habitat) of the area to be surveyed to ensure complete coverage. A combination of taped vocalizations and “pishing” sounds were used at each calling point. A detailed description of the survey methodology is included in the Results of Focused Coastal California Gnatcatcher Surveys in **Appendix 5.3**.

## **EXISTING CONDITIONS**

The project site covers 107.65 acres and is located on the Newhall 7.5-minute USGS quadrangle map in northern Los Angeles County. The site is located within the City of Santa Clarita and is surrounded primarily by single-family homes and ranches. Newhall Avenue/Railroad Avenue lies to the south and west of the project site. Newhall Creek flows through the southern section of the site. Portions of the master plan component of the proposed project lie to the north of Placerita Canyon Road, but most of the master plan and the remaining four project components involve area to the south of this road. The area to be cleared and graded within the proposed grading limit line is located within the larger portion of the project site between Placerita Canyon Road and Newhall Creek. The analysis of potential impacts to biological resources focuses on this proposed impact area within the primary grading footprint, which encompasses 48.9 acres, the proposed storm drain system locations outside of the primary grading footprint and adjacent biological resources.

The topography of the impact area ranges from approximately 1,275 feet above mean sea level at Newhall Creek to approximately 1,455 feet at the highest ridgeline. Several ridges stem from the main east-west trending ridgeline and lead south toward Newhall Creek. The topography is highly variable across the impact area with slopes that are steeper than 23 percent.

## BIOLOGICAL RESOURCES

The project site consists primarily of disturbed or ruderal vegetation with remnant patches of coastal sage scrub. There is evidence of past disturbance, including pedestrian/bike trails and charred vegetation that suggests a brush fire occurred in the past few years. The plant and wildlife resources that characterize the project site are discussed below. Those resources considered “common” are discussed first; resources considered special-status by local, state, and/or federal resource agencies are discussed under the **Special-Status Biological Resources** heading of this document.

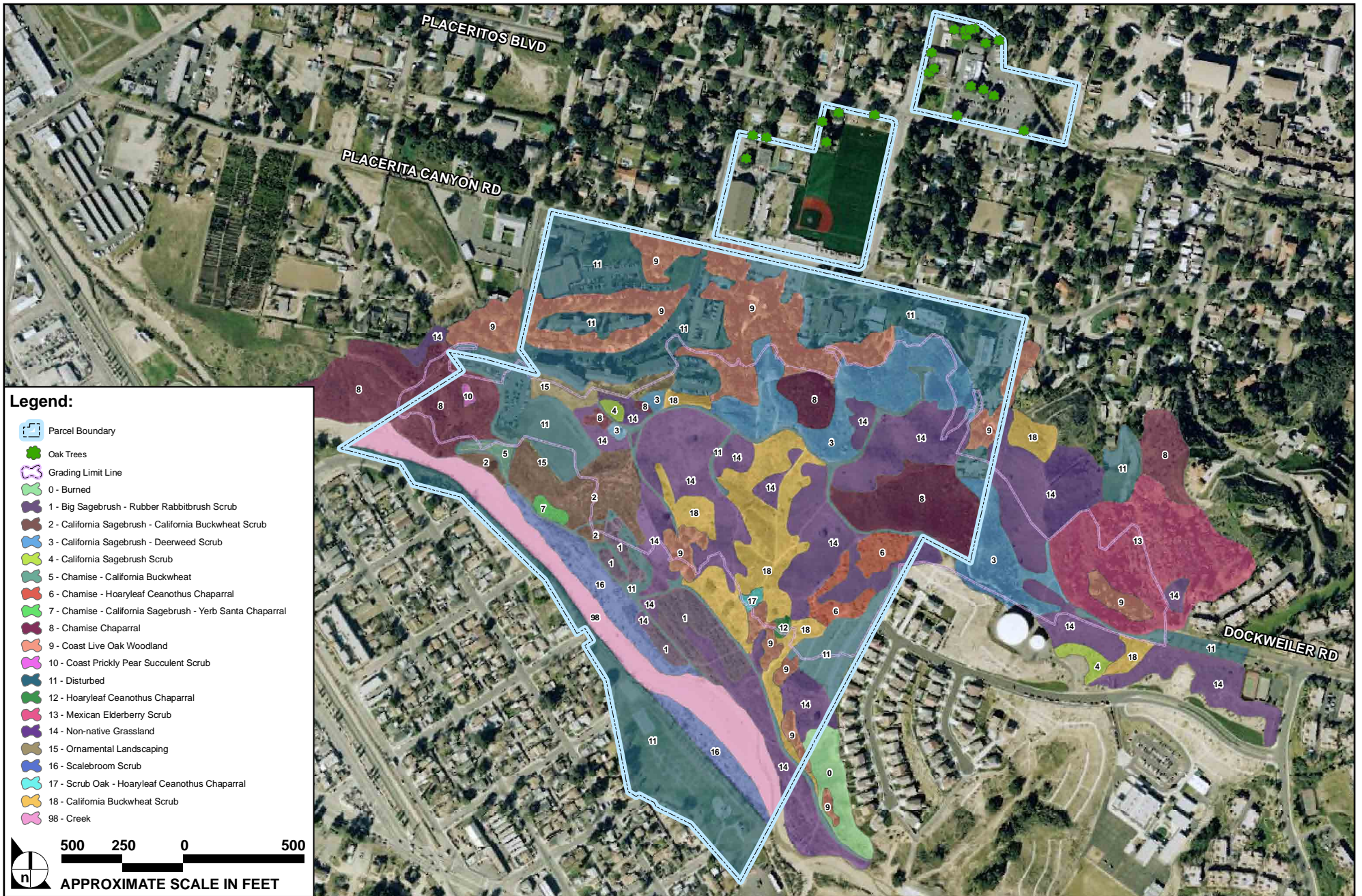
### Plant Communities

There are 18 primary plant communities as classified by CDFG’s *List of California Terrestrial Natural Communities* on site: Big Sagebrush-Rubber Rabbitbrush Scrub, California Sagebrush Scrub, California Buckwheat Scrub, California Sagebrush-California Buckwheat Scrub, California Sagebrush-Deerweed Scrub, Chamise Chaparral, Chamise-California Buckwheat Chaparral, Chamise-California Sagebrush-Yerba Santa Chaparral, Chamise-Hoary-leaf Ceanothus Scrub, Coast Live Oak Woodland, Coast Prickly Pear Succulent Scrub, “Disturbed”, Hoary-leaf Ceanothus Scrub, Mexican Elderberry Scrub, Non-native grassland, Ornamental Landscaping, Scalebroom Scrub, and Scrub Oak-Hoary-leaf Ceanothus Chaparral. Two plant communities, Scalebroom Scrub and Coast Prickly Pear Scrub, are considered sensitive natural communities by the CDFG, requiring mitigation for any acreage impacted. **Figure 5.3-1, Vegetation on The Master’s College Master Plan Site**, shows the locations of these plant communities on the project site. Oak trees located with the portions of The Master’s College campus north of Placerita Canyon Road are shown in **Figure 5.3-1** as well, although individual oak trees within a developed area do not constitute a Coast Live Oak Woodland plant community.

#### ***Big Sagebrush-Rubber Rabbitbrush Scrub***

Big Sagebrush-Rubber Rabbitbrush Scrub occurs in flat areas adjacent to Newhall Creek on 2.48 acres. This vegetation type is dominated by a mix of big sagebrush (*Artemisia tridentata*) and rubber rabbitbrush (*Chrysothamnus nauseosus*). Several other shrub species, such California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*) are found in this community, in addition to various grass and herbaceous species, including downy brome (*Bromus tectorum*), red brome (*Bromus madritensis* ssp. *rubens*), and storks-bill filaree (*Erodium cicutarium*).





SOURCE: The Master's College Master Plan - January 2007

FIGURE 5.3-1

Vegetation on the Master's College Master Plan Site

### ***California Sagebrush-California Buckwheat Scrub***

In the western portion of the site adjacent to the Scalebroom Scrub and Newhall Creek, there are patches of vegetation that is a mix between two series, the California Sagebrush Scrub and California Buckwheat Scrub. This plant community encompasses 3.2 acres. This vegetation has two dominant plants, California sagebrush and California buckwheat. The shrubs, grasses, and annual herbs associated with these two series, including deerweed, red brome, and white sage (*Salvia apiana*), are also found in the mixed series.

### ***California Sagebrush-Deerweed Scrub***

On the northern sides of the ridges, facing the existing college campus, there are large areas of the California Sagebrush-Deerweed community, totaling 8.18 acres. The California Sagebrush-Deerweed Scrub is dominated by California sagebrush and deerweed, although chamise (*Adenostoma fasciculatum*) and California buckwheat do occur in relatively low concentrations. This community also has an almost continuous canopy, allowing for little growth underneath.

### ***California Sagebrush Scrub***

Several small patches of California Sagebrush Scrub scattered across the site total 0.53 acre. This vegetation type contains medium-sized shrubs, dominated by California sagebrush, and relatively low concentrations of purple sage (*Salvia leucophylla*), deerweed (*Lotus scoparius*), and California buckwheat. This community has nearly continuous canopy; canopy cover suppresses most herbaceous growth underneath.

### ***Chamise-California Buckwheat Chaparral***

An area of 0.25 acre dominated by chamise and California buckwheat exists on the western side of the site, just north of Newhall Creek. These shrub species make up the Chamise-California Buckwheat Chaparral community. Associated within this community are species such as Yerba Santa, white sage, and chaparral yucca (*Yucca whipplei*).

### ***Chamise- Hoary-leaf Ceanothus Chaparral***

Two areas along the eastern boundary of the site, totaling 1.45 acres, contain vegetation that is dominated by both chamise and hoary-leaf ceanothus. These plant species make up the Chamise-Hoary-leaf Ceanothus community, which is characterized by a dense, shrubby overstory with relatively few plants in the understory.



### ***Chamise-California Sagebrush-Yerba Santa Chaparral***

An area of 0.23 acre alongside Newhall Creek contains vegetation containing three dominants, chamise, California sagebrush, and Yerba Santa. These dominants characterize the Chamise–California Sagebrush–Yerba Santa Chaparral community. Relatively few plants occur in the understory due to a dense canopy, but it does include species such as chaparral yucca, white sage, and deerweed.

### ***Chamise Chaparral***

Chamise Chaparral occurs in a couple of patches near the California Sagebrush–Deerweed Scrub community on the north-facing slopes as well as in the southwestern portion of the site near Newhall Creek, and encompasses a total of 12.35 acres on the site. This community consists of very dense cover dominated by chamise, measuring approximately 4 feet in height. Other chaparral shrubs are present, although in substantially lower densities, including hoary-leaf ceanothus (*Ceanothus crassifolius*), California buckwheat, Yerba Santa (*Eriodictyon crassifolium*), and California sagebrush. Grasses and herbaceous annuals can also be found in the understory of the chaparral community, when the overlying shrubs are less dense.

### ***Coast Live Oak Woodland***

The Coast Live Oak Woodland community covers 12.66 acres in the northern portion of the site among existing campus structures and in patches at the bottom of the slopes in the southern portion of the site. This community contains coast live oak trees that are approximately 20 to 40 feet tall with intermittent grasses, annual herbs, and shrubs. Red brome, ripgut brome (*Bromus diandrus*), and wild oats are all found in association with this series. Other species include hoary-leaf ceanothus, horehound (*Marrubium vulgare*), and holly-leaf cherry (*Prunus ilicifolia*).

### ***Coast Prickly Pear Succulent Scrub***

In the northwest portion of the site, a small portion (0.09 acre) of the natural vegetation consists of the Coast Prickly Pear Succulent Scrub community. The coast prickly pear cactus (*Opuntia littoralis*) dominates this vegetation. This community also contains species that make up the California Sagebrush Scrub community, including California sagebrush, purple sage, and California buckwheat. This community is considered a sensitive natural community by the CDFG.

### ***Disturbed***

Disturbed defines areas that are devoid of vegetation due to human-associated activities. Disturbed areas on the site total 31.42 acres and include The Master's College intramural field in the western portion of the site, and hiking/biking trails and roads throughout the site.

### ***Hoary-leaf Ceanothus Chaparral***

Hoary-leaf Ceanothus Chaparral occurs in a small patch (0.12 acre) on a south-facing slope in the southeast portion of the project site facing Newhall creek. Hoary-leaf ceanothus is the dominant plant within this community, averaging between 10 to 15 feet in height. There are few understory plants in this community, due to a dense canopy.

### ***Mexican Elderberry Scrub***

One patch of 7.60 acres within the eastern portion of the site contains vegetation dominated by Mexican elderberry shrubs and trees. This community can be characterized by medium-sized shrubs and trees and species that occur in other scrub communities, including California sagebrush, deerweed, and chamise.

### ***Non-Native Grassland***

The majority of vegetation on site consists of the Non-Native Grassland community (24.67 acres), dominated by exotic annual grasses such as wild oats (*Avena fatua*), red brome (*Bromus madritensis* ssp. *rubens*), and ripgut brome (*Bromus diandrus*). This community contains a number of annual herb species as well, such as black mustard (*Brassica nigra*), storks-bill filaree (*Erodium cicutarium*), and star thistle (*Centaurea melitensis*).

### ***Ornamental Landscaping***

Exotic ornamental trees and plants occur near the college and housing structures on site and cover a total of 1.15 acres. These include species such as pepper trees (*Schinus molle*), oleander (*Nerium oleander*), and elm trees (*Ulmus* sp.)

### ***Scalebroom Scrub***

Along the Newhall Creek bed is a community that can be described as Scalebroom Scrub, dominated by intermittent scalebroom (*Lepidospartum squamatum*) shrubs with various shrubs, herbaceous annuals, and grasses interspersed. Species observed in this community include California buckwheat, mulefat, rubber

rabbitbrush, and downy brome. This community covers 3.34 acres of the site and is considered a sensitive natural community by the CDFG.

### ***Scrub Oak-Hoary-leaf Ceanothus Chaparral***

A dense assemblage of chaparral containing scrub oak (*Quercus berberidifolia*) and hoary-leaf ceanothus occurs in the southeastern area of the site on 0.14 acre. These two dominants create a dense canopy, with few plant species growing underneath. The understory is composed almost entirely of grasses, including downy brome and ripgut brome.

### ***California Buckwheat Scrub***

Several south-facing slopes within the ridges and valleys just north of Newhall Creek contain vegetation typified as the California Buckwheat Scrub plant community, composed almost entirely of California buckwheat shrubs. The shrubs, measuring 2 to 3 feet in height, are interspersed with various exotic grasses, such as red brome and wild oats (*Avena fatua*), growing in between. California Buckwheat Scrub covers 7.4 acres of the site.

## **Common Wildlife Resources**

Representative common wildlife species (those not provided a sensitivity status by regulatory agencies) that were observed on the project site during the general field surveys are discussed below. Special-status wildlife species present or potentially occurring on the project site are discussed in the **Special-Status Biological Resources** section.

### ***Amphibians and Reptiles***

Amphibians are expected to be found only in low numbers on the project site, due in large part to the lack of persistent or permanent surface water in Newhall Creek on a year-round basis. However, as some amphibian species may move considerable distances from breeding sites during the non-breeding season, there is potential for a few amphibian species to occur, especially when water flows through Newhall Creek. Western toad and Pacific chorus frog, both of which are abundant locally in disturbed sites and even urban situations, would be expected to occur on the project site.

One reptile was observed on site, the side blotched lizard (*Uta stansburiana*). However, field surveys were conducted in the late fall when reptiles are less active. Other common reptile species with the potential to occur on the project site include the western fence lizard (*Sceloporus occidentalis*), San Diego alligator lizard (*Elgaria malticarinata webbiai*), western skink (*Eumeces skiltonianus*), common kingsnake (*Lampropeltis getulus*), and southern Pacific rattlesnake (*Crotalus viridis helleri*).

## **Birds**

The following avian species were observed on the site during the general field surveys: western scrub jay (*Aphelocoma californica*), red-tailed hawk (*Buteo jamaicensis*), California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), house finch (*Carpodacus mexicanus*), turkey vulture (*Cathartes aura*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), American kestrel (*Falco sparverius*), northern mockingbird (*Mimus polyglottus*), California towhee (*Pipilo crissalis*), Bewick's wren (*Thryomanes bewickii*), western kingbird (*Tyrannus verticalis*), mourning dove (*Zenaidura macroura*), and white-crowned sparrow (*Zonotrichia leucophrys*).

The avian species listed above were observed again during the focused surveys for the coastal California gnatcatcher as well as the following additional species: Cooper's hawk (*Accipiter cooperii*), red-shouldered hawk (*Buteo lineatus*), white-tailed kite (*Elanus leucurus*), killdeer (*Charadrius vociferous*), rock dove (*Columba livia*), greater roadrunner (*Geococcyx californianus*), black-chinned hummingbird (*Archilochus alexandri*), ash-throated flycatcher (*Myiarchus cinerascens*), California horned lark (*Eremophila alpestris actia*), cliff swallow (*Hirundo pyrrhonota*), northern rough-winged swallow (*Stelgidopteryx serripennis*), oak titmouse (*Baeolophus inornatus*), bushtit (*Psaltriparus minimus*), house wren (*Troglodytes aedon*), wren-tit (*Chamaea fasciata*), California thrasher (*Toxostoma redivivum*), phainopepla (*Phainopepla nitens*), European starling (*Sturnus vulgaris*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), lark sparrow (*Chonodestes grammacus*), yellow-rumped warbler (*Dendroica coronata*), Bullock's oriole (*Icterus bullockii*), black-headed grosbeak (*Pheucticus melanocephalus*), spotted towhee (*Pipilo erythrophthalmus*), and lesser goldfinch (*Carduelis psaltria*).

## **Mammals**

During the general field surveys and focused surveys for the coastal California gnatcatcher, the following mammalian species were observed or detected: the California ground squirrel (*Spermophilus beecheyi*), Audubon's cottontail (*Sylvilagus audubonii*), brush rabbit (*Sylvilagus bachmani*), coyote (*Canis latrans*), Botta's pocket gopher (*Thomomys bottae*), bobcat (*Lynx rufus*), and mule deer (*Odocoileus hemionus*).

## **Special-Status Biological Resources**

The following is a discussion of special-status plant and animal species observed and potentially occurring on the project site. Occurrence potential for each species is based on habitat types present on the site, a review of the CNDDDB (2006) and CNPS (2006) databases and the Santa Clarita Valley General Plan Technical Background Report (2004), known geographic ranges of each species, and observations made during the general field surveys. Also included in this section is a discussion of plant communities

on the project site that are considered unique, of relatively limited distribution, under the jurisdiction of state and/or federal resource agencies, or are of particular value to wildlife.

### *Plant Species*

Special-status plant species include those that are (1) state or federally listed as Rare, Threatened, or Endangered; (2) proposed for state or federal listing as Rare, Threatened, or Endangered; (3) federal or state candidate species for listing, or (4) considered federal or state Species of Concern. Plants included on Lists 1 or 2 of the CNPS inventory are also considered special status.

As listed in **Table 5.3-1**, 22 special-status plant species have been reported to occur within the project vicinity (CNDDDB 2006, CNPS 2006, SCV General Plan 2004). It was determined that 12 of these species are not expected to occur on the project site due to lack of suitable habitat; the remaining 10 species have the potential to occur on the project site. Occurrence potential for each of the species is summarized in **Table 5.3-1**.

**Table 5.3-1**  
**Special-Status Plant Species Potentially Occurring in The Master's College Master Plan Vicinity**

Scientific and Common Names	Status			Habitat	Life Form & Flowering Period	Occurrence Potential
	Federal	State	CNPS			
<i>Allium howellii</i> <i>var. clokeyi</i> Mt. Pinos onion			1B.3	Great Basin scrub, pinyon and juniper woodland at elevation: 4265–6070 ft.	Bulbiferous herb April–June	<i>Not Expected:</i> No suitable habitat exists on site.
<i>Aster greatae</i> Greata's aster			1B.3	Broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland; mesic at elevation: 985-6600 ft.	Rhizomatous herb June–October	<i>Not Expected:</i> No suitable habitat (mesic soils) on site.
<i>Astragalus</i> <i>brauntonii</i> Braunton's milk vetch	FE		1B.1	Closed-cone coniferous forest, chaparral, coastal scrub, valley/foothill grassland; recent burns or disturbed areas with limestone substrate at elevation: 13–2100 ft.	Perennial herb February–July	<i>Potential:</i> Marginal suitable habitat (recently burned chaparral or limestone substrate) exists on site, though outside of known range.

Scientific and Common Names	Status			Habitat	Life Form & Flowering Period	Occurrence Potential
	Federal	State	CNPS			
<i>Berberis nevinii</i> Nevin's barberry	FE	CE	1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub; sandy/gravelly at elevation: 970–2700 ft.	Evergreen shrub March–June	<i>Potential:</i> Suitable habitat exists on site.
<i>Calochortus clavatus var. gracilis</i> Slender mariposa lily			1B.2	Chaparral, coastal scrub at elevation: 1180–3280 ft.	Bulbiferous herb March–June	<i>Potential:</i> Suitable habitat exists on site
<i>Calochortus plummerae</i> Plummer's mariposa lily			1B.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley/foothill grassland; granitic/rocky at elevation: 330–5600 ft.	Bulbiferous herb May–July	<i>Potential:</i> Marginal suitable habitat exists on the site. Chaparral and coastal scrub are present, but the site does not contain granitic/rocky features.
* <i>Calystegia peirsonii</i> Pierson's morning glory	FSC		4.2	Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland at elevation: 100–4900 ft.	Rhizomatus herb May–June	<i>Potential:</i> Suitable habitat exists on site.
<i>Chorizanthe parryi var. fernandina</i> San Fernando Valley spineflower	FC	CE	1B.1	Coastal scrub; sandy at elevation: 490–4000 ft.	Annual herb April–July	<i>Potential:</i> Suitable habitat exists on site.
<i>Deinandra minthornii</i> Santa Susana tarplant		CR	1B.2	Chaparral, coastal scrub; sandstone bluffs and outcrops at elevation: 920–2500 ft.	Evergreen shrub July– November	<i>Not Expected:</i> No suitable habitat (rocky outcrops) exists on site.
<i>Dodecahema leptoceras</i> Slender- horned spineflower	FE	CE	1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan)/sandy at elevation: 656–2500 ft.	Annual herb April–June	<i>Not Expected:</i> Suitable habitat does not exist on the site as the species is confined to flood terraces adjacent to drainage courses.



Scientific and Common Names	Status			Habitat	Life Form & Flowering Period	Occurrence Potential
	Federal	State	CNPS			
<i>Erodium macrophyllum</i> Round-leaved filaree			2.1	Cismontane woodland, valley/foothill grassland; clay at elevation: 50–3950 ft.	Annual herb March–May	<i>Not Expected:</i> No suitable habitat exists on site.
<i>Galium grande</i> San Gabriel bedstraw			1B.2	Broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest at elevation: 1400–4900 ft.	Deciduous shrub January–July	<i>Potential:</i> Marginal suitable habitat exists on site.
* <i>Harpagonella palmeri</i> Palmer’s grappling hook	FSC		4.2	Chaparral, coastal scrub, valley and foothill grassland; clay soils at elevation: 65– 3100 ft.	Annual herb March–May	<i>Potential:</i> Suitable habitat (chaparral, coastal scrub) exists on site.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower			1A	Marshes and swamps (coastal salt and freshwater) at elevation: 33–5500 ft.	Rhizomatous herb August– October	<i>Not Expected:</i> No suitable habitat exists on site.
* <i>Lotus nuttallianus</i> Nuttall’s lotus	FSC		1B.1	Coastal dunes, sandy coastal scrub at elevation: 0–32 ft.	Annual herb March–June	<i>Not Expected:</i> No suitable habitat exists on site.
<i>Malacothamnus davidsonii</i> Davidson’s bush mallow			1B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland at elevation: 610–2800 ft.	Evergreen shrub June–January	<i>Potential:</i> Suitable habitat exists on site, but no individuals were observed during the general field surveys.
<i>Navarretia fossalis</i> Spreading navarretia	FT		1B.1	Chenopod scrub, marshes and swamps (shallow freshwater), playas, vernal pools at elevation: 100–4300 ft.	Annual herb April–June	<i>Not Expected:</i> No suitable habitat found on site.

Scientific and Common Names	Status			Habitat	Life Form & Flowering Period	Occurrence Potential
	Federal	State	CNPS			
<i>Opuntia basilaris</i> var. <i>brachyclada</i> Short-joint beavertail			1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland at elevation: 1390–5900 ft.	Stem succulent April–June	<i>Not Expected:</i> Suitable habitat exists on site but project site is below the species' elevational range. Recorded location in Quigley Canyon at elevation of 1400–1600 ft. (1 mile from project site) <sup>1</sup> is probably a misidentification as this species has not been verified to occur in the Santa Clarita Valley
<i>Orcuttia californica</i> California orcutt grass	FE	CE	1B.1	Vernal pools at elevation: 50–2200 ft.	Annual herb April–August	<i>Not Expected:</i> No suitable habitat exists on site.
* <i>Ribes divaricatus</i> var. <i>parishii</i> Parish's gooseberry	FSC		1B.1	Riparian woodland at elevation: 210–330 ft	Deciduous shrub February–April	<i>Not Expected:</i> No suitable habitat exists on site.
<i>Senecio aphanactis</i> Rayless ragwort			2.2	Chaparral, cismontane woodland, coastal scrub; alkaline flats at elevation: 50–2600 ft	Annual herb January–April	<i>Potential:</i> Suitable habitat (chaparral and coastal sage scrub) exists on site.
* <i>Stylocline masonii</i> Mason's neststraw			1B.1	Chenopod or desert scrub, pinyon and juniper woodland at elevation: 330–4000 ft	Annual herb March–May	<i>Not Expected:</i> No suitable habitat exists on site.

**Key:**

\*Reported to occur in the region, according to SCV General Plan, 2004.

**Status:**

**Federal:** FE = Federal Endangered Species; FT = Federal Threatened Species; FC=Candidate for Federal Listing; FSC=Federal Special Concern Species

**State:** CE = State Endangered Species; CR = California Rare

**CNPS:** 1A = Plants presumed extinct in California; 1B = Plants rare, threatened, or endangered in California and elsewhere; 2 = Plants rare, threatened, or endangered in California, but more common elsewhere

<sup>1</sup> U.S. Bureau of Land Management. Short-Joint Beavertail. Retrieved from [http://www.blm.gov/ca/pdfs/cdd\\_pdfs/shortjoint1.PDF](http://www.blm.gov/ca/pdfs/cdd_pdfs/shortjoint1.PDF) on December 27, 2006.

### Special-Status Plant Species Observed on the Site

During the focused plant survey, no special-status plants were observed on the project site. Because the 2007 presence/absence plant survey was conducted during the appropriate blooming period for those special-status plant species previously recorded in the area, and because the extent of the site was traversed by foot in appropriate habitats for supporting special-status plant species; no special-status plant species are expected to occur on the project site. A list of all plant species observed during the focused survey is provided in **Appendix 5.3**.

Oak trees that are subject to the provisions of the City of Santa Clarita Oak Tree Preservation and Protection Policy were observed on the site. Oak tree surveys were conducted on the project site between 2005 and 2007. An oak tree report dated October 3, 2005 was prepared that catalogued all of the oak trees on the project site and included detailed information on the health of each tree. Addendums to the October 2005 report were prepared in September 2006, February 2007, and November 2007. The original oak tree report and all three addendums are included in **Appendix 5.3** of this EIR. The oak tree surveys revealed 388 oak trees (345 *Quercus agrifolia* and 43 *Quercus berberidifolia*) on the project site, 35 of which are Heritage Oak Trees (any oak tree measuring 108 inches or more in circumference or, in the case of a multiple trunk tree, two or more trunks measuring 72 inches each or greater in circumference, measured at 4.5 feet above the natural grade). Five oak trees were dead or had fallen due to a storm during the 2005 survey, and six more have died or fallen since the 2005 survey. Specific locations of oak trees as well as other characteristics are provided in the oak tree report and addendums in **Appendix 5.3**.

### *Wildlife Species*

The term special-status wildlife includes those species that are state or federally listed as Threatened or Endangered, have been proposed or are candidates for listing as Threatened or Endangered, are considered state Species of Special Concern, CDFG Special Animals, California Protected or Fully Protected Species, and/or are Federal Species of Concern.

A total of 38 species are addressed in this report and are evaluated based on on-site habitats compared with each species' life history requirements, occurrence records of species in the project vicinity, and documented geographic distribution of each species. All special-status wildlife species addressed in this report are listed in **Table 5.3-2, Special-Status Wildlife Species Potentially Occurring in The Master's College Master Plan Project Area Vicinity**. Seventeen special-status wildlife species have the potential to occur in habitats found on the project site, five of which were observed on the site.

**Table 5.3-2  
Special-Status Wildlife Species Potentially Occurring in The Master's College Master Plan Project Area Vicinity**

Scientific and Common Names	Status		Habitat	Occurrence Potential
	Federal	State		
<b>INVERTEBRATES</b>				
<i>Danaus plexippus</i> Monarch butterfly		CNDDB	Winter in eucalyptus groves near the coast	<i>Not Expected:</i> No suitable habitat exists on site.
<b>FISH</b>				
<i>Catostomus santaanae</i> Santa Ana sucker	FT	CSC	Small to medium-sized (<7 m. wide) permanent streams in water ranging in depth from a few centimeters to a meter or more; substrates are generally coarse and consist of gravel, rubble, and boulder	<i>Not Expected:</i> No perennial streams exist on the project site.
<i>Gasterosteus aculeatus williamsoni</i> Unarmored threespine stickleback	FE	CE	Clear, flowing, well-oxygenated water with associated pools and eddies of quiet water and areas of dense vegetation or debris to provide adequate cover and food supply.	<i>Not Expected:</i> No perennial streams exist on the project site.
<i>Gilia orcuttii</i> Arroyo chub		CSC	Slow moving or backwater sections of warm to cool streams with mud or sand substrates.	<i>Not Expected:</i> No perennial streams exist on the project site.
<b>AMPHIBIANS</b>				
<i>Bufo californicus</i> Arroyo toad	FE	CSC	Breeds in overflow pools adjacent to the inflow channel of 3 <sup>rd</sup> -to-greater-order streams that are free of predatory fishes; exposed pools that are shallow, sand- or gravel-based and have a low current velocity	<i>Not Expected:</i> No suitable habitat (riparian habitat with willow/cottonwood/sycamore stands) exists on site.

Scientific and Common Names	Status		Habitat	Occurrence Potential
	Federal	State		
<b>AMPHIBIANS cont'd</b>				
<i>Emys marmorata pallida</i> Southwestern pond turtle		CSC	Slow-moving permanent or intermittent streams, small ponds, small lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and sewage treatment lagoons	<i>Not Expected:</i> No suitable habitat exists on site.
<i>Rana aurora draytonii</i> California red-legged frog	FT	CSC	Dense, shrubby riparian vegetation associated with deep, still or slow-moving water; arroyo willow, cattails, and bulrushes provide suitable habitat	<i>Not Expected:</i> No suitable habitat (dense riparian habitat) exists on site.
<i>Rana muscosa</i> Mountain yellow-legged frog	FE	CSC	Ponds, dams, lakes, and streams at moderate to high elevations; absent from the smallest creeks probably because these have insufficient depth for adequate refuge and overwintering	<i>Not Expected:</i> No suitable habitat (sufficient water at high elevations) exists on site.
<i>Spea hammondi</i> Western spadefoot		CSC	Open areas with sandy or gravelly soils; mixed woodlands, grasslands, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains.	<i>Potential:</i> Suitable habitat exists within or adjacent to Newhall Creek.

Scientific and Common Names	Status		Habitat	Occurrence Potential
	Federal	State		
<b>REPTILES</b>				
<i>Anniella pulchra pulchra</i> Silvery legless lizard		CSC	Burrows in loose soil, in areas vegetated with oak or pine-oak woodland, or chaparral; also wooded stream edges, and occasionally desert-scrub. Often found in leaf litter, under rocks, logs, and driftwood.	<i>Potential:</i> Suitable habitat exists on site in loose soils and leaf litter beneath oak trees.
<i>Aspidoscelis tigris stejnegeri</i> Coastal western whiptail		CSC	Open, rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations	<i>Observed:</i> Suitable habitat (open, sandy coastal sage scrub) exists on site, and observed during the CAGN surveys.
<i>Phrynosoma coronatum</i> ( <i>blainvillii</i> pop.) Coast (San Diego) horned lizard		CSC	Areas with abundant, open vegetation such as chaparral or coastal sage scrub; also grassland, coniferous woods, and broadleaf woodlands; typically it is found in areas with sandy soil, scattered shrubs, and ant colonies, such as along the edges of arroyo bottoms or dirt roads	<i>Potential:</i> Suitable habitat (open, sandy coastal sage scrub) exists on site.
* <i>Salvador hexalepis virgultea</i> Coast patch-nosed snake		CSC	Generalist-desert scrub, coastal chaparral, washes, sandy flats, and rocky areas.	<i>Potential:</i> Suitable habitat (chaparral, sandy wash) exists on site.
<i>Thamnophis hammondi</i> Two-striped garter snake		CSC	Forages primarily in and along streams; normally found in the immediate vicinity of permanent or semi-permanent water; elevation: sea level to 8,000 ft.	<i>Not Expected:</i> No suitable habitat (riparian, permanent/semi-permanent streams) exists on site.

Scientific and Common Names	Status		Habitat	Occurrence Potential
	Federal	State		
<b>BIRDS</b>				
<i>Accipiter cooperii</i> Cooper's hawk		CSC	Nests in deciduous, conifer, and mixed woodlands; favors riparian habitats; hunts at the edge of wooded areas	<i>Observed:</i> Suitable foraging habitat exists on site, and observed during CAGN surveys.
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow		CSC	Grass-covered hillsides, coastal sage scrub, chaparral and edges of these habitats; sparse low grass or brush, often those successional habitats that follow brush fires	<i>Observed:</i> Suitable habitat exists on site, and observed during CAGN surveys.
* <i>Aquila chrysaetos</i> Golden eagle		CSC	Open country (e.g., tundra, open coniferous forest, desert, barren areas); rolling foothills, mountain areas, sage-juniper flats, desert	<i>Not Expected:</i> Project site is not of suitable size for golden eagle and is surrounded by development.
* <i>Amphispiza belli</i> Bell's sage sparrow	FSC	CSC	Dry chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills	<i>Potential:</i> Suitable habitat (chaparral and coastal sage scrub) exists on site.
<i>Athene cunicularia</i> Burrowing owl		CSC	Open areas with mammal burrows (soft soils); dry open rolling hills, grasslands, fallow fields, sparsely vegetated desert scrub with gullies, washes, arroyos, and edges of human disturbed lands	<i>Not Expected:</i> No suitable habitat (open, relatively flat scrub) exists on site.

Scientific and Common Names	Status		Habitat	Occurrence Potential
	Federal	State		
<b>BIRDS cont'd</b>				
* <i>Buteo swainsoni</i> Swainson's hawk		CT	Open desert, sparse shrub lands, grassland, or cropland containing scattered, large trees or small groves; nests typically at the edge of a narrow band of riparian vegetation, in isolated oak woodland, and in lone trees, roadside trees, or farmyard trees, as well as in adjacent urban residential areas	<i>Potential:</i> Suitable foraging and nesting habitat exists on site.
* <i>Circus cyaneus</i> Northern harrier		CSC	Non-native grassland, sage scrub, chaparral, croplands; home range usually includes fresh water	<i>Potential:</i> Though it prefers aquatic habitats, it could forage over the project site.
<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	FC	CE	Riparian habitats with willows and cottonwoods and walnut and almond orchards; nests in dense understory foliage	<i>Not Expected:</i> No suitable habitat (dense riparian woodland) exists on site.
<i>Dendroica petechia brewsteri</i> Yellow warbler		CSC	Lowland and foothill riparian woodlands dominated by cottonwoods, alders, willows	<i>Not Expected:</i> No suitable habitat (dense riparian woodland) exists on site.
<i>Elanus leucurus</i> White-tailed kite		CSC	Coastal and valley lowlands, agricultural areas, undisturbed open grasslands, meadows, farmlands, and emergent wetlands	<i>Observed:</i> Suitable foraging habitat exists on site, and observed during CAGN surveys.
* <i>Eremophila alpestris actia</i> California horned lark		CSC	Open fields, (short) grasslands, and rangelands; gently sloping and level fields	<i>Observed:</i> Observed during the CAGN surveys.



Scientific and Common Names	Status		Habitat	Occurrence Potential
	Federal	State		
<b>BIRDS cont'd</b>				
* <i>Falco mexicanus</i> Prairie falcon		CSC	Primarily perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub; areas where there are cliffs or bluffs for nest sites	<i>Not Expected:</i> No suitable habitat (perennial grasslands, rangeland, cliffs) exists on site.
<i>Gymnogyps californianus</i> California condor	FE	CE	Nests in mountain cliff caves or large old-growth trees; forages in large open grasslands and oak savanna foothills	<i>Not Expected:</i> No suitable habitat (large open grassland/oak savanna) exists on site.
<i>Icteria virens</i> Yellow-breasted chat		CSC	Dense, wide, second-growth riparian thickets and brush; nests associated with streams, swampy ground, small ponds	<i>Not Expected:</i> No suitable habitat (dense riparian woodland) exists on site.
* <i>Lanius ludovicianus</i> Loggerhead shrike	FSC	CSC	Forages in areas of short vegetation, pastures, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs; nests in valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats	<i>Potential:</i> Suitable foraging habitat exists on site, but no suitable nesting habitat exists on site.
<i>Polioptila californica californica</i> Coastal California gnatcatcher	FT	CSC	Low-lying, level, open coastal sage scrub or chaparral, grassland, and riparian communities adjacent to sage scrub	<i>Not Expected:</i> Though some suitable foraging habitat is found on-site, none was observed during the 2007 CAGN surveys.

Scientific and Common Names	Status		Habitat	Occurrence Potential
	Federal	State		
<b>MAMMALS</b>				
<i>Vireo bellii pusillus</i> Least Bell's vireo	FE	CE	Riparian woodland habitats; nests in dense shrub cover 3–6 ft. from the ground and forages in dense, stratified canopies that include cottonwoods and oak woodlands with willow understory.	<i>Not Expected:</i> No suitable habitat (dense riparian woodland) exists on site.
<i>Antrozous pallidus</i> Pallid bat		CSC	Grasslands, shrublands, woodlands, and forests; open, dry habitats with rocky areas for roosting	<i>Not Expected:</i> No suitable habitat (rock crevices) exists on site.
<i>Euderma maculatum</i> Spotted bat		CSC	Arid deserts, grasslands, and mixed conifer forests; roosts in rock crevices	<i>Not Expected:</i> No suitable habitat (rock crevices) exists on site.
<i>Eumops perotis californicus</i> Western mastiff bat		CSC	Dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, montane meadows, and agricultural areas; roosts in crevices in granitic rocks	<i>Not Expected:</i> No suitable habitat (rock crevices) exists on site.
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit		CSC	Open areas or semi-open country, typically in grasslands, agricultural fields or sparse coastal scrub	<i>Potential:</i> Suitable habitat (open, sparse coastal scrub) exists on site.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat		CSC	Shrub and desert habitats associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth; builds dens out of twigs and debris	<i>Potential:</i> Suitable habitat (chaparral and sage scrub with coast prickly pear cactus) exists on site.

Scientific and Common Names	Status		Habitat	Occurrence Potential
	Federal	State		
<b>MAMMALS cont'd</b>				
<i>Neotamias speciosus speciosus</i> Lodgepole chipmunk	USFS		High montane areas; open canopy lodgepole pine habitat; elevation: 6,000–10,350 ft.	<i>Not Expected:</i> No suitable habitat exists on site, which is well outside the elevational range.
<i>Onychomys torridus Ramona</i> Southern grasshopper mouse		CSC	Low arid scrub and semi-scrub vegetation; nest in burrows in sandy or other friable substrates	<i>Potential:</i> Marginally suitable habitat exists on site. This species is more common in creosote scrub, but can also be found in chaparral/coastal scrub.

**KEY:**

\*Known to occur in the region, according to SCV General Plan, 2004.

**Federal**

FE: Federally listed endangered species.

FT: Federally listed threatened species

FC: Federal Candidate for Listing

FSC: Federal Special Species of Concern

USFS: Forest Service Sensitive Species

**State**

CE: State-listed endangered species

CT: State-listed threatened species

CSC: CDFG Species of Special Concern

CNDDDB: CNDDDB Special Animals List

### Special-Status Wildlife Species Observed on the Site

None of the special-status wildlife species listed above in **Table 5.3-2** or their evidence was observed on site during the general field surveys. However, four of the special-status bird species and one special-status reptile were observed during the focused surveys for coastal California gnatcatchers: Cooper's hawk, southern California rufous-crowned sparrow, white-tailed kite, California horned lark, and coastal western whiptail, all California Species of Special Concern.

### Special-Status Wildlife Species with Potential to Occur on the Site

#### *Amphibians and Reptiles*

The western spadefoot toad (*Spea hammondi*), a California Species of Special Concern, is the only amphibian with the potential to occur on the project site. It typically prefers lowlands, floodplains, and alluvial fans and would most likely occur in and around Newhall Creek, especially when water is present. Newhall Creek is within the project site, but south of the grading limit.

The silvery legless lizard (*Anniella pulchra pulchra*), coast horned lizard (*Phrynosoma coronatum blainvillii* pop.), coast patch-nosed snake (*Salvador hexalepis virgulata*), and coastal western whiptail (*Aspidoscelis tigris stejnegeri*), all California Species of Special Concern, have the potential to occur on the project site. The silvery legless lizard prefers leaf litter and sandy soils beneath oak trees in which it can burrow, while the coast horned lizard, coastal western whiptail, and/or coast patch-nosed snake would likely be found in the open, sandy, coastal scrub and chaparral habitats found on the site.

### **Birds**

Suitable foraging habitat exists on the site for the white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), Bell's sage sparrow (*Amphispiza belli*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), loggerhead shrike (*Lanius ludovicianus*), and northern harrier (*Circus cyaneus*), all California Species of Special Concern, and Swainson's hawk (*Buteo swainsoni*), a state Threatened species. Therefore, all of these special-status birds have the potential to occur on the site. While the white-tailed kite, Cooper's hawk, loggerhead shrike, and northern harrier are expected to only forage on the site, as they prefer dense stands of deciduous trees or riparian habitats for nesting, the Bell's sage sparrow, southern California rufous-crowned sparrow, and Swainson's hawk could potentially nest on the project site (sparrows in the sage scrub on steep slopes and Swainson's hawk in the woodland areas).

The coastal California gnatcatcher (*Poliophtila californica californica*), a federal Threatened species and a California Species of Special Concern, inhabits low-lying, level, open coastal sage scrub or chaparral, as well as grassland and riparian communities adjacent to sage scrub. The majority of the project site contains steep slopes, which is not the preferred habitat for coastal California gnatcatchers. However, the project site and immediately adjacent open space consists of approximately 70 acres of sage scrub and chaparral, more than adequate for the coastal California gnatcatcher home range, which is typically 13 to 39 acres (USFWS 2003). Coastal California gnatcatchers have been known to avoid steep slopes for nesting, but may still forage or disperse into areas with steep slopes (USFWS 2003). Because there is suitable foraging habitat on site for this species, a focused survey was conducted during April and May of 2007, and no coastal California gnatcatchers were observed. Therefore, coastal California gnatcatchers are considered absent from the project site at this time.

### **Mammals**

The southern grasshopper mouse (*Onychomys torridus ramona*), a California Species of Special Concern, typically prefers desert creosote scrub habitats, but is also found in chaparral and sage scrub where shrubs are sparse and soils are sandy, which describes the habitat found on the project site. The San

Diego black-tailed jackrabbit (*Lepus californicus bennettii*) has the potential to inhabit the open, sparse coastal sage scrub found on the project site. The dense areas of chaparral and sage scrub, especially where coast prickly pear grows, are suitable habitats for the San Diego desert woodrat (*Neotoma lepida intermedia*), a California Species of Special Concern, that builds dens out of twigs and debris, usually among prickly pear cacti. These special-status mammal species were not observed during general field surveys conducted on the project site. However, as the project site provides suitable habitat for these species, pre-construction surveys are required under **Mitigation Measure 5.3-7 below**.

### ***Sensitive Plant Communities Present On Site***

Coast Prickly Pear Succulent Scrub, which covers 0.09 acre in the northwest portion of the site, and Scalebroom Scrub, which covers 3.34 acres in the southern portion of the site along Newhall Creek, are considered sensitive plant communities by CDFG (2003).

### **Jurisdictional Waters, Streambed, and Riparian Resources**

The portion of Newhall Creek and several small ephemeral drainages that drain to the creek on the project site are potentially under the jurisdictional authority of federal and state regulatory agencies. Impacts to "Waters," streambeds and adjacent riparian vegetation, as defined in the regulations cited below, typically require authorizations from the agencies. The regulatory agencies and the limits of their jurisdiction are discussed below.

#### ***U.S. Army Corps of Engineers (ACOE)***

Federal regulations of "Waters of the U.S." stem from Section 10 of the Federal Rivers and Harbors Act of 1899, enacted to regulate activities within navigable waters. In 1972, the federal Clean Water Act was passed. This act regulates discharges into Waters of the US Section 404 of this act regulates activities including fills placed into wetlands that are adjacent to navigable waters.

Waters of the US are defined in 33 CFR 328.3(a) as:

- All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.
- All interstate waters including interstate wetlands.
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters.
- Waters that are or could be used by interstate or foreign travelers for recreational or other purposes.

- Waters from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- Waters that are used or could be used for industrial purpose by industries in interstate commerce.
- All impoundments of waters otherwise defined as Waters of the US under the definition.
- The territorial seas.
- Tributaries of Waters of the US.
- Wetlands adjacent to Waters of the US.

ACOE jurisdiction in non-tidal waters typically extends to the ordinary high water mark (OHWM). The OHWM for intermittent streams, for example, can be determined by “the fluctuations of water as indicated by physical characteristics such as clear, natural lines impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 CFR 328.3(e)]. In arid areas of the southwest, the OHWM may occur at a lower level than where the typical physical indicators are present, due to unusually high flows, not occurring on a typical annual cycle. (Allen, et al. 2001)

Most impacts to areas delineated as Waters of the US, if determined to be jurisdictional by the ACOE, require a project to obtain approval under the authority of the Clean Water Act and its implementing regulations.

### ***California Department of Fish and Game (CDFG)***

The State of California regulates water resources under Sections 1600 to 1619 of the Fish and Game Code of California. Section 1602 mandates that

*An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake or dispose of debris, waste, or other material...where it may pass into any river stream, or lake...*

Unless certain requirements are met, CDFG considers most natural drainages to be streambeds unless it can be demonstrated otherwise. Streambeds are defined in the California Code of Regulations Title 14, Chapter 1, Section 1.72 as follows:

*A stream is a body of water that follows at least periodically or intermittently through a bed or channel having banks and that support fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.*

CDFG jurisdiction includes ephemeral, intermittent, and perennial watercourses, and is often extended to the limit of riparian habitats that are located contiguous to the water resource and that function as part of

the watercourse system. In this analysis, the area generally corresponding to the limit of riparian habitats located contiguous to the water resource is also referred to as the “resource line.” Section 2785(e) of the Fish and Game Code of California states:

*Riparian habitat means lands which contain habitat which grows close to and which depends on soil moisture from a nearby freshwater source.*

### ***Regional Water Quality Control Board***

Section 401 of the federal Clean Water Act authorizes the State of California to certify federal permits and licenses. 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 ACOE 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, and mitigation measures) necessary to apply for ACOE Section 404 and CDFG Section 1603 Permits is required for the Section 401 Certification.

Direct and indirect impacts on wetland and riparian areas may be subject to the jurisdiction of several state and federal agencies, including the CDFG, the Los Angeles RWQCB, and the ACOE. Areas potentially under the jurisdiction of these agencies are briefly discussed below.

### ***Summary of Jurisdiction***

Several small ephemeral drainages drain runoff from the southern slopes on the project site to Newhall Creek. These drainages are potentially under the jurisdiction of ACOE, CDFG, and/or RWQCB and are within the grading limit line. Newhall Creek is tributary to the Santa Clara River South Fork, which is tributary to the Santa Clara River. Newhall Creek is within the project site and is under the jurisdiction of ACOE, CDFG, and RWQCB.

A formal delineation, pursuant to ACOE survey protocols, shall be completed for the ephemeral drainages and Newhall Creek that are on the subject property and impacts to jurisdictional areas shall be quantified. If jurisdictional resources are present within the project impact area, the discharge of fill into ACOE jurisdictional areas would require a permit pursuant to Section 404 of the Clean Water Act. Any modification to a streambed, including removal of riparian vegetation, may require a streambed alteration agreement from CDFG pursuant to Section 1600 of the California Fish and Game Code.

## Wildlife Movement Corridors

Habitat used by wildlife as a movement corridor links together large areas of open space that are otherwise separated by rugged terrain, changes in vegetation, human disturbance, or the encroachment of urban development. The fragmentation of natural habitat creates isolated 'islands' of vegetation that may not individually provide sufficient area to accommodate sustainable populations and can adversely impact genetic and species diversity. Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic exchange with separate populations; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire, flood, or disease) will result in population or species extinction; and (3) serving as travel paths for animals that require larger home ranges to meet their normal requirements of food, water, and cover.

The project site is entirely surrounded by development, including road networks, and therefore is not connected to other habitat patches. However, Newhall Creek runs through the southern end of the site and could be considered a wildlife corridor. Stream corridors are usually important movement corridors for wildlife, because they provide water, food, and often cover by riparian vegetation for protection from predators. Newhall Creek does not flow year-round, and riparian vegetation is limited to sparse shrubs; therefore, it is not an ideal movement corridor. Newhall Creek is the only undeveloped pathway that connects open spaces through the region, but the nearest open spaces to the project site are limited in size, and residential, commercial, and industrial uses surround Newhall Creek upstream and downstream of the project site.

## PROJECT IMPACTS

### Methodology

Direct impacts of a proposed project on biological resources typically involve the loss, modification, or disturbance of natural habitat (i.e., plant communities or other naturally occurring areas) which in turn, directly affects plant and wildlife species dependent on that habitat. To determine areas of expected impact on biological resources, proposed grading plans were evaluated and compared with the habitat map (map of plant communities). The level of significance of potential impacts on habitat areas is determined by an evaluation of the overall biological value of a habitat area with respect to significance threshold criteria (described below). The relative value of each of the plant communities present on site is measured by such factors as disturbance history, biological diversity, importance to particular plant and wildlife species, uniqueness or sensitivity status, as well as the surrounding environment and the presence of special-status resources. The significance of impacts with respect to 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 sensitivity status if the species is considered special status by resource agencies. These factors are evaluated based on the results of on-site biological surveys and studies, results of literature and database reviews, and established and recognized ecological and biodiversity theories and assumptions.

## Significance Threshold Criteria

### *Santa Clarita Environmental Guidelines*

According to the City of Santa Clarita Environmental Guidelines, a project would have a significant effect on the environment if it would

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFG or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or USFWS;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, 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; or
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

The first five criteria in the Santa Clarita Environmental Guidelines are addressed in the **Direct Impacts** analysis subsection below. The sixth criterion is not relevant to the proposed project, because the project site is not located within an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Section 15065(a) of the *State California Environmental Quality Act (CEQA) Guidelines* also states that a project may have a significant effect on the environment when the project has the potential to

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

### ***Santa Clarita General Plan***

**Goal 3:** Sensitive Habitat Areas, in the Santa Clarita General Plan Open Space and Conservation Element is “to protect significant ecological resources and ecosystems, including, but not limited to, sensitive flora and fauna habitat areas.” Policies that aim to achieve this goal and are relevant to development impacts to biological resources are as follows:

**Policy 3.1:** Incorporate standards for a Significant Ecological Areas (SEA) Overlay Zone in the Municipal Zoning Code.

**Policy 3.2:** Encourage the preservation of oak woodlands, oak savannahs, and individually significant oak trees through enforcement and revisions to the Oak Tree Ordinance.

**Policy 3.3:** Identify and protect areas of significant ecological value, including, but not limited to, significant ecological habitats such as the wildlife corridor between the Santa Susana Mountains and the San Gabriel Mountains and preserve and enhance existing Significant Ecological Areas (SEAs).

**Policy 3.4:** Consolidate open space areas that represent regionally significant wildlife corridors to promote continued wildlife productivity and diversity on a regional scale and restrict development and intensive human activity in areas that sustain rare or endangered species, such as migratory bird species, fish, and rare plant species.

**Policy 3.5:** Promote only compatible and, where appropriate, passive recreational uses in areas designated as Significant Ecological Areas (SEA) consistent with the particular needs and characteristics of each SEA, as determined by field investigation.

**Policy 3.7:** Preserve to the extent feasible natural riparian habitat and ensure that adequate setback is provided between riparian habitat and surrounding urbanization.

**Policy 3.10:** Development shall consider to the extent feasible, preservation of wildlife corridors and provide adequate setbacks.

Policies 3.1, 3.3, and 3.5 encourage the protection of Significant Ecological Areas (SEA). The project site is not within an SEA, and therefore these policies are not applicable to the project. Policies 3.2, 3.4, 3.7, and 3.10 are implemented by the Santa Clarita Environmental Guidelines (below) to determine whether a project's impacts are significant and are addressed under the **Direct Impacts** subsection.

### ***City Oak Tree Ordinance***

Section 17.17.090, Oak Tree Preservation, of the City of Santa Clarita UDC, as well as the Oak Tree Preservation and Protection Guidelines developed by the City, provide for the protection of oak trees within the City limits. The UDC establishes that it shall be the policy of the City to require the preservation of healthy oak trees and that removal, cutting, pruning, relocation, damage, or encroachment into the protected zone of any oak trees measuring 6 inches or larger in circumference (at DBH) on public or private property can only be done in accordance with a valid oak tree permit issued by the City. Impacts to trees that fall within the criteria set by the UDC are considered potentially significant.

An oak tree report was prepared in October 2005 and four addenda were prepared in February 2006, September 2006, February 2007, and November 2007 for oak trees within the project site. This report with addenda is included in its entirety in **Appendix 5.3**.

### **Direct Impacts**

Direct impacts discussed in this section are the effects of implementation of the proposed project on plant communities, common and special-status plant and wildlife species, special-status habitats, and wildlife movement corridors and whether these effects exceed the thresholds of significance. Because most biological resources, particularly plants and wildlife, are dependent upon the condition, extent, and character of specific ecosystems and habitat types, impacts to these resources are generally discussed in terms of the effect of project-related activities on natural habitat areas, (i.e., on plant communities). Direct impacts with respect to specific plant and wildlife resources (e.g., active nests, dens, 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.

## Plant Communities

The principal direct impact of implementation of the proposed project is to convert 43.5 acres of the project site (about 40 percent) from an undeveloped to a developed condition. The approximate acreage and percentage of each of the vegetation/habitat types expected to be disturbed on the site as a result of project implementation are provided in **Table 5.3-3, Impacts to Plant Communities Proposed by Project Implementation**, and are described below.

**Table 5.3-3  
Impacts to Plant Communities Proposed by Project Implementation**

Plant Community	Total Acres	Acres	Percent	Acres
	Present	Impacted	Impacted	Remaining
Big Sagebrush – Rubber Rabbitbrush Scrub	2.48	0.43	17	2.05
California Sagebrush – California Buckwheat Scrub	3.20	1.95	61	1.64
California Sagebrush – Deerweed Scrub	8.18	7.31	89	0.87
California Sagebrush Scrub	0.53	0.15	29	0.37
Chamise – California Buckwheat	0.25	0.05	20	0.20
Chamise – Hoaryleaf Ceanothus Chaparral	1.45	1.45	100	0
Chamise – California Sagebrush – Yerb Santa Chaparral	0.23	0.12	52	0.11
Chamise Chaparral	12.35	6.93	56	5.42
Coast Live Oak Woodland	12.66	2.39	19	10.27
Coast Prickly Pear Succulent Scrub*	0.09	0.09	100	0
Disturbed	31.42	(6.15)	20	25.27
Hoaryleaf Ceanothus Chaparral	0.12	0.09	77	0.03
Mexican Elderberry Scrub	7.60	3.21	42	4.38
Non-native Grassland	24.67	13.55	55	11.12
Ornamental Landscaping	1.15	0.66	57	0.49
Scalebroom Scrub*	3.34	0.05	1.5	3.29
Scrub Oak – Hoaryleaf Ceanothus Chaparral	0.14	0.12	84	0.02
California Buckwheat Scrub	7.40	4.93	66	2.47
<b>Total<sup>1</sup></b>	<b>117.26</b>	<b>43.48</b>		<b>68</b>

\* CDFG Sensitive Plant Communities

<sup>1</sup> Total exceeds project site area because a small portion of the area bordering the project site was included in the mapping of on-site vegetation communities. However, all identified impacted areas are within the project site.

### Sage Scrub and Chaparral Series

The majority of the project site consists of various series of the coastal sage scrub and chaparral communities, which have the potential to support many of the special-status wildlife species that may occur on the site. The series found on site include Big Sagebrush-Rubber Rabbitbrush Scrub, California Sagebrush Scrub, California Buckwheat Scrub, California Sagebrush-California Buckwheat Scrub, California Sagebrush-Deerweed Scrub, Chamise Chaparral, Chamise-California Buckwheat Chaparral, Chamise-California Sagebrush-Yerba Santa Chaparral, Chamise-Hoary-leaf Ceanothus Chaparral, Hoary-leaf Ceanothus Scrub, Mexican Elderberry Scrub, and Scrub Oak-Hoary-leaf Ceanothus Chaparral. Approximately 58 percent of these sage scrub and chaparral series found on the project site would be cleared and graded during project construction. **Table 5.3-3** provides a breakdown of the area to be impacted for each series. None of these series is classified as a special-status community by CDFG, and none is protected specifically by the Santa Clarita General Plan policies. However, these series do have the potential to provide habitat for the following reptilian and mammalian California Species of Special Concern: silvery legless lizard, coast horned lizard, coastal western whiptail, coast patch-nosed snake, southern grasshopper mouse, San Diego black-tailed jackrabbit, and San Diego desert woodrat. These series also have the potential to provide foraging habitat for white-tailed kite, Cooper's hawk, loggerhead shrike, and northern harrier, and both foraging and nesting habitat for southern California rufous-crowned sparrow, Bell's sage sparrow, and Swainson's hawk, all California Species of Special Concern. More than half of this habitat would be impacted by project implementation. Because these sage scrub and chaparral habitats have the potential to support special-status wildlife and more than half of these habitats would be cleared and graded for project construction, the project's impacts to these plant communities would be significant. **Mitigation Measure 5.3-1**, the replacement of coastal sage scrub and chaparral habitats on-site and/or restoration of these communities on available off-site property on a 1:1 ratio would reduce this impact to less than significant.

### Coast Live Oak Woodland

Nearly 13 acres of Coast Live Oak Woodland are present at the bottom of the southern slopes and among the existing campus structures on the project site. The Coast Live Oak Woodland has the potential to support several California Species of Special Concern, including silvery legless lizard and coast horned lizard, and provide nesting habitat for Swainson's hawk. Project implementation would impact 2 acres, or 17 percent of this habitat type. Policy 3.2 of the Santa Clarita General Plan encourages the preservation of oak woodlands through the Section 17.17.090, Oak Tree Preservation, of the City of Santa Clarita UDC. The California Board of Forestry and Fire Protection considers stands of oak trees with a canopy cover of 10 percent or more to be significant. The project site contains a cover of 11 percent oak woodland, and therefore the impact to this oak woodland would be considered significant. Impacts to individual oak

trees are discussed under **(3) Special Status Plant and Wildlife Species**. The mitigation for impacts to individual oak trees (**Mitigation Measure 5.3-5**) would be to implement an oak tree planting plan (**Appendix 5.3**) that would include 744 oak trees, some of which would be planted around structures, and others which would be planted in open space areas as oak woodland. The oak tree planting plan would mitigate for impacts to oak woodlands on-site, because more than 2 acres of oak woodland would be created in remaining open space areas as part of the oak tree planting plan. Therefore, with **Mitigation Measure 5.3-5**, the oak tree mitigation plan, project impacts to oak woodland would be less than significant.

#### **Coast Prickly Pear Succulent Scrub**

A small area (0.09 acre) in the northwestern portion of the project site consists of Coast Prickly Pear Succulent Scrub, which is designated as a sensitive plant community by CDFG (2003). This vegetation type has the potential to support San Diego desert woodrat, a California Species of Special Concern. Because CDFG has classified Coast Prickly Pear Succulent Scrub as a sensitive plant community and project construction would eliminate this plant community from the project site, this impact would be significant. **Mitigation Measure 5.3-2**, replacing the Coast Prickly Pear Succulent Scrub community on a 1:1 ratio on the project site or adjacent property, would mitigate this impact to a less than significant level.

#### **Scalebroom Scrub**

There are 3.34 acres of Scalebroom Scrub along Newhall Creek. This community is considered a sensitive natural community by the CDFG. The proposed storm drain system included within the master plan would impact 0.05 acre of this plant community, which constitutes 1.5 percent of the community on the project site. Of the 0.05-acre impact, only 0.003 acre would be permanently impacted by the construction of a stormwater basin and swale entering Newhall Creek. The remaining 0.04 acre of Scalebroom Scrub to be impacted would be temporarily impacted by trenching and laying pipes for stormwater conveyance. The impact to Scalebroom Scrub would be significant, but replacement of this plant community once the stormwater pipes are installed, **Mitigation Measure 5.3-3**, would mitigate this impact to less than significant.

#### **Non-Native Grassland**

The majority of vegetation on site consists of the Non-Native Grassland community, dominated by exotic annual grasses. More than 13 of the nearly 25 acres of non-native grassland on the site would be impacted by the proposed project. The California Species of Special Concern that may occur in the sage scrub and chaparral habitats may also forage in the Non-Native Grassland. These include silvery legless lizard, coast horned lizard, coastal western whiptail, coast patch-nosed snake, southern grasshopper mouse, San

Diego black-tailed jackrabbit, San Diego desert woodrat, white-tailed kite, Cooper's hawk, loggerhead shrike, northern harrier, southern California rufous-crowned sparrow, Bell's sage sparrow, and Swainson's hawk. The coastal California gnatcatcher, a federal Threatened species, could forage in the Non-Native Grassland as well, but the sage scrub habitat is more significant to the gnatcatcher than the grassland habitat. Non-Native Grassland is not native to the project area and is not listed as a sensitive community, but it still has the potential to support special-status species, and therefore the project's impact to this community is considered significant. Pre-construction surveys to find and relocate any Species of Special Concern, **Mitigation Measure 5.3-7**, would be conducted prior to project construction to lessen the potential impacts to those sensitive species that may forage in the non-native grassland. With implementation of pre-construction surveys for California Species of Special Concern, the proposed impacts to Non-Native Grassland would be less than significant.

### **Ornamental Landscaping**

A small area (1.15 acres) of ornamental landscaping occurs near the college, where pepper trees, elm trees, and oleander were planted. Approximately half of this area would be graded to allow for the extension of Dockweiler Drive. Ornamental trees within this area of the project site may support common bird species during the nesting season. However, these trees are neither native nor special-status, and therefore removal of ornamental trees to allow for site grading would not result in a significant impact. If construction commences during the nesting season, pre-construction, nesting bird surveys would be conducted prior to project construction to lessen the potential impacts to birds that may nest in these trees.

### ***Common Wildlife***

Construction activity and grading operations of the proposed project would disturb and/or threaten the survival of common wildlife species on the site. Some species would be expected to relocate to other areas of similar habitat within the local area. However, wildlife that migrate from the site are vulnerable to mortality by predation, potential conflicts with people and cars, and unsuccessful competition for food and territory. Species of low mobility (particularly amphibians and reptiles) could be eliminated during site preparation and construction.

Replacement of existing vegetation with structures and ornamental landscaping would eliminate natural communities on developed portions of the site and result in a reduction in native wildlife species diversity. A number of animal species would be replaced with a fauna composed of species more tolerant of, or even dependant upon, urban settings.

Although some loss of common wildlife is expected during construction of the proposed project, because of the relatively common occurrence of these common wildlife species that would be displaced or lost, project implementation is not expected to cause a current wildlife population on or adjacent to the project site to drop below self-sustaining levels. Therefore, impacts to common reptile, amphibian, or mammal species would be less than significant.

However, common native bird species are protected by the Migratory Bird Treaty Act and the California Fish and Game Code, which prohibit the take (defined as destroy, harm, harass, etc.) of bird nests with eggs or young. Forty avian species were observed on the site between the general biological survey and the coastal California gnatcatcher survey, and these species could be adversely affected, if nesting, as a result of implementation of the proposed project. Implementation of the proposed project would impact bird nesting habitat as it involves the removal of mature trees and shrubs from the property. Construction-related activities could result in the direct loss of active nests or the abandonment of active nests by adult birds during that year's nesting season. The loss of active nests of native birds would be a significant impact, according to the Migratory Bird Treaty Act and the California Fish and Game Code. Therefore, if project construction would take place during the nesting season, pre-construction nesting bird surveys and protection efforts (**Mitigation Measure 5.3-4**) will be required and would mitigate this impact to less than significant.

### ***Special-Status Plant and Wildlife Resources***

#### **Special-Status Plant Species**

The 2007 focused plant surveys determined that special-status plant species are absent from the project site. Therefore, implementation of the proposed project would not impact special-status plant resources, other than City-protected oak trees, and no mitigation is required.

#### ***Oak Trees***

As described previously, oak tree surveys were conducted on the project site between 2005 and 2007 and revealed 388 oak trees (345 *Quercus agrifolia* and 43 *Quercus berberidifolia*) on the project site, 35 of which are Heritage Oak Trees. The project proposes to remove 79 healthy oak trees (none of which are heritage oaks), encroach into the dripline of 75 healthy oak trees, and encroach into the 5-foot protected zone of 22 healthy oaks, all of which are significant impacts to oak trees on the project site. Six of the oak trees surveyed on site have died following the 2005 rainstorms and natural causes. In addition, there are a number of oak trees that are near human-use areas and have defects, which pose risks to people and property and would require treatments such as crown reduction pruning, support cabling, and even removal of the tree to reduce risks.



Section 17.17.090, Oak Tree Preservation, of the City of Santa Clarita UDC requires the preservation of all healthy oak trees in the City unless compelling reasons justify the removal of such trees, more specifically, “no person shall cut, prune, relocate, endanger, damage or encroach into the protected zone of any oak tree on any public or private property within the City except in accordance with the conditions of a valid oak tree permit issued by the City.” Application requirements for the permits include an oak tree report, surveys of the trees and their driplines and protected zone locations, and illustrations and justifications of the proposal. According to Section 17.17.090, Oak Tree Preservation, of the City of Santa Clarita UDC, these proposed impacts to oak trees would be significant, and City permits are required. Because more than four oak trees would be removed and more than one Heritage Oak Tree would be impacted, the application must be reviewed by the City Council for approval. Conditions of the oak tree permits may include the replacement or placement of additional trees on the subject property to offset impacts associated with the loss of a tree, limbs or encroachment into the protected zone of an oak tree; relocation of trees on site or off site; a maintenance and care program for existing oak trees on the property; and/or payment of a fee or donation of boxed trees to the City or other approved public agency to be used elsewhere in the City. The February 2007 Addendum to the Master Plan Tree Survey recommends purchasing replacement trees over the relocation of trees, because the relocation of oaks that have grown on steep slopes is not typically successful.

The applicant developed an oak tree mitigation plan in collaboration with the City of Santa Clarita Oak Tree Specialist and Craig Crotty of Arbor Culture. The oak tree mitigation plan proposes to mitigate the impacts to oak trees. The oak tree mitigation plan includes the replacement rather than the relocation of oak trees on the site according to the recommendation provided in the February 2007 addendum to the 2005 oak tree report. The proposed locations, oak tree species, and oak tree size were developed based on site-specific characteristics. As the proposed oak tree mitigation plan was developed specifically for the project site by licensed arborists, the proposed plan is expected to be highly effective. Additionally, the planting plan must be approved by the City Council during the oak tree permit application review. Further, construction impacts to oak tree protection zones would be mitigated by **Mitigation Measure 5.3-6** during construction-related activities. With **Mitigation Measures 5.3-5** and **5.3-6**, and approval by the City Council, impacts to oak trees would be reduced to less than significant.

### **Special-Status Wildlife**

The potential direct impacts to special-status wildlife species occurring, or potentially occurring on the project site are discussed below in terms of the actual loss of active nests, dens, and individual animals, as well as the habitat that supports these species.

### *Amphibians and Reptiles*

The western spadefoot toad, a California Species of Special Concern, has the potential to occur in and around Newhall Creek, especially when water is present. Newhall Creek is within the project site, but south of the grading limit line. Because the potentially suitable habitat for western spadefoot toad is outside of the project impact area, no direct impacts would occur to the western spadefoot toad as a result of project construction.

The silvery legless lizard, coast horned lizard, coast patch-nosed snake, and coastal western whiptail, all California Species of Special Concern, have the potential to occur on the project site within the coastal sage scrub, chaparral, and oak woodlands. These suitable habitats are located within the project impact area. Because of their sensitivity status, the loss of individuals of these species within the project site would be considered a significant impact. However, with the implementation of **Mitigation Measure 5.3-7**, which provides for the relocation of any silvery legless or coast horned lizards, coast patch-nosed snakes, or coastal western whiptails found on the site to appropriate off-site locations to avoid and/or minimize the direct loss of these animals, direct impacts to these special-status reptile species would be reduced to a level of less than significant.

### *Birds*

Suitable foraging habitat exists on the site for the white-tailed kite, southern California rufous-crowned sparrow, Cooper's hawk, Bell's sage sparrow, loggerhead shrike, California horned lark and northern harrier, all California Species of Special Concern, as well as Swainson's hawk, a state Threatened species. Cooper's hawk and white-tailed kite were observed nesting on the project site, and California horned lark and southern California rufous-crowned sparrow were observed foraging on the project site during the focused surveys for coastal California gnatcatcher. Loggerhead shrike and northern harrier were not observed on site during surveys, but they have the potential to forage on the project site, and Bell's sage sparrow and Swainson's hawk could potentially nest on the project site. The focused surveys for the coastal California gnatcatcher determined that this species is absent from the project site during this time.

During site preparation activities, special-status bird species, such as the white-tailed kite, southern California rufous-crowned sparrow, Bell's sage sparrow, Cooper's hawk, loggerhead shrike, northern harrier, Swainson's hawk, and California horned lark, potentially foraging within the project impact area are expected to be displaced to remaining undisturbed sage scrub habitat on site, or other undeveloped habitat in the project vicinity. Because foraging birds are able to escape to other foraging habitats in the region during construction, the project would have a less than significant impact to foraging special-status bird species.

Vegetation clearing and grading within sage scrub and chaparral habitat and removal of mature trees, if conducted during the nesting season of these special-status bird species, could result in the direct loss of active nests, including eggs, young, or incubating adults, which would be considered a significant impact. If project construction is commenced during the nesting season, a pre-construction nesting bird survey (**Mitigation Measure 5.3-4**) will be required and would reduce this potential impact to less than significant.

### *Mammals*

The southern grasshopper mouse and San Diego black-tailed jackrabbit, both California Species of Special Concern, have the potential to inhabit the open, sparse coastal sage scrub found on the project site. The dense areas of chaparral and sage scrub, especially where coast prickly pear grows, are suitable habitats for the San Diego desert woodrat, also a California Species of Special Concern. These special-status mammal species were not observed during the general field surveys, but since focused surveys were not conducted for these species, there is potential for their presence. The suitable habitats for these species are within the project impact area. Because of their sensitivity status, the loss of individuals of these species within the project site would be considered a significant impact. Pre-construction surveys for special-status wildlife (**Mitigation Measure 5.3-7**) will be implemented and would reduce this impact to less than significant.

### *Jurisdictional Resources*

A swale will be installed to convey stormwater into Newhall Creek from the project's planned stormwater system. In addition, the small ephemeral drainages that drain runoff from the steep slopes of the site into Newhall Creek are within the project impact area and may fall under the regulatory jurisdiction of the ACOE, CDFG, and RWQCB.

Prior to construction activities, a jurisdictional resources delineation and analysis shall be conducted, and confirmed by the agencies, to determine the acreage of jurisdictional habitat that would be affected as a result of project implementation. The loss of any habitat under the jurisdiction of ACOE, CDFG, and RWQCB would be subject to the regulatory and permitting authority of these agencies, and would be mitigated under the direction of these agencies. The project's impacts to Waters of the US under ACOE jurisdiction and riparian habitat under CDFG jurisdiction would be significant, but permits and corresponding mitigation required by ACOE and CDFG regulations would mitigate these impacts to less than significant (**Mitigation Measure 5.3-8**).

### ***Wildlife Movement Corridors***

The project site is entirely surrounded by development, including road networks, and therefore is not connected to other habitat patches. However, Newhall Creek runs through the southern end of the site and is the only undeveloped pathway that connects open spaces through the project vicinity. As the southern end of the project site, including Newhall Creek, is not within the grading limit line the habitat that buffers the creek would not be impacted by project implementation. Construction of the proposed project would not directly impact the Newhall Creek corridor.

### **Indirect Impacts**

Indirect impacts to biological resources would occur to those habitat areas that remain around the project site after the completion of the proposed project. It is expected that implementation of the proposed project would result in indirect impacts to biological resources in the following ways:

- An increased human and domestic animal presence in the area and noise associated with this presence
- Increase in populations of non-native plant species
- Increased light and glare;
- Stormwater runoff
- Construction activities

Indirect impacts associated with the proposed project are not quantifiable but are reasonably foreseeable. As such, the discussion that follows provides a common-sense identification of the types of secondary impacts and their relative magnitude such 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 Human and Domestic Animal Presence***

Implementation of the proposed project would increase human and domestic animal presence in the area. Increased recreational and other human activity around these habitats could displace a number of wildlife species, increase the amount of refuse and pollutants in the area, compact soils, and trample ground-dwelling flora and fauna. Increased human activities adjacent to Newhall Creek could also deter some animals, especially larger more secretive mammal species, such as coyote, from utilizing these habitats.

With no physical constraints in place to contain equestrians on designated trails or to exclude off-road vehicles, additional recreational use increases the likelihood of intrusion into sensitive habitat areas, trampling of habitats, noise disturbances to wildlife (especially if within the breeding season of birds and raptors) which can result in nest abandonment, and introduction of non-native plant species. Depending upon the season and location, this additional use can also cause increased erosion, siltation, and disruption of the hydrologic regime of the creek, possibly resulting in disturbance of downstream breeding areas for special-status fish or amphibian species. The wildlife movement corridor that is defined by Newhall Creek could also be impacted indirectly by increased recreational use of the area by residents of the project.

Increased use of the site by domestic animals can disturb nesting or roosting sites and disrupt the normal foraging activities of wildlife in adjacent habitat areas. Should this activity occur frequently, and over a long time period, these disturbances may have a long-term effect on the behavior of both common and special-status animals and can result in their extirpation from the area. Feral cats, as well as house cats, can cause substantial damage to the species composition of natural areas through predation, including populations of special-status species.

An increase in recreational uses and use by domestic animals of the area around Newhall Creek as a result of project implementation would affect the quality of these areas as wildlife habitat, would potentially interfere with the movement of wildlife, and would potentially reduce the population of wildlife species. However, the project site is already surrounded by residential development and is impacted by recreational and domestic animal use. Therefore, the indirect impacts potentially caused by increased human and domestic animal presence as a result of project implementation would be less than significant with implementation of **Mitigation Measure 5.3-9**.

### *Increase in Populations of Non-Native Species*

After project completion, a number of non-native plant and wildlife species (e.g., tamarisk, giant cane, salt cedar, European starlings, house sparrows, etc.) that are more adapted to urban environments are expected to increase in population and potentially displace native species because of their ability to compete more effectively for resources. Non-native plants tend to be more adaptable to urban settings and adjacent open space areas and can out-compete native plants for available resources.

However, historical and ongoing development in the vicinity of the project site has likely supported continual and ongoing increases and proliferation of non-native plant and wildlife species populations in remaining natural habitats. Consequently, the proposed project is not expected to substantially increase the distribution of non-native plants and wildlife in the remaining open spaces in the project site area.

Therefore, impacts to the remaining natural areas as a result of potential increases in non-native plants and wildlife resulting from project implementation are expected to be less than significant, given compliance with **Mitigation Measure 5.3-10**.

### ***Increased Light and Glare***

The expansion of the college and development of a residential community would increase the number of nighttime light and glare sources on the site over current levels. Nighttime illumination is known to adversely affect some species of animals in natural areas. Nighttime light can disturb breeding and foraging behavior and can potentially alter breeding cycles of birds, mammals, and nocturnal invertebrates. Light could deter some animal species, especially the larger mammals, from using Newhall Creek as a wildlife movement corridor. If uncontrolled, such light could adversely impact the composition and behavior of the animal species that occur in these areas. The project site is currently surrounded by development, and much of the site already receives some nighttime illumination from these urban areas. However, the project would bring development closer to the creek and increase nighttime lighting and glare, which would be a potentially significant impact to the Newhall Creek corridor. **Mitigation Measure 5.3-11** would decrease this impact to less than significant.

### ***Stormwater and Urban 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 the Newhall Creek corridor that contains high levels of nutrients, particularly fertilizers and waste products such as nitrogen and phosphorous, could result in eutrophication (excessive nutrient buildup) downstream (Newhall Creek connects to the Santa Clara River). This in turn can result in depletion of available oxygen due to increased Biological Oxygen Demand (BOD) by the nutrient-eating bacteria in the water, reducing available dissolved oxygen for fish and other aquatic organisms. Other chemicals, pesticides, and herbicides can also adversely affect aquatic systems.

Paved surfaces could also contribute runoff into the riparian corridor during storm events. Depending on the magnitude and frequency of storm events and the overall level of the water quality, this runoff can cause increased eutrophication, depleted oxygen levels, long-term build-up of toxic compounds and heavy metals, and other adverse effects to biological resources associated with aquatic systems.

Since the use of chemicals and the extent of over-irrigation for landscaping within common and residential areas cannot be determined prior to project implementation, impacts related to stormwater and irrigation runoff could substantially affect special-status species potentially occurring downstream from the project site, substantially diminish habitat for fish, wildlife, or plants, and substantially degrade

the quality of the environment. Though Newhall Creek is ephemeral, meaning it does not have permanent water flowing year-round, increased pollutant-containing runoff could still have an impact on the Creek when water is flowing or to waterways further downstream. Therefore, these impacts would be considered potentially significant. **Section 5.5, Hydrology and Water Quality**, evaluates these potential impacts in further detail and discusses the stormwater runoff system Best Management Practices (BMPs) incorporated into the project design and the required compliance with National Pollutant Discharge Elimination System permits, to reduce these water quality impacts to less than significant.

### *Construction Activities*

Project construction (particularly site clearing and grading operations) would have the potential to impact surrounding areas not being developed by adversely affecting remaining plant communities and plant and animal species. Specifically, these impacts can include displacement and disturbance of wildlife, which could result in possible nest or den abandonment during the breeding season, siltation and erosion into drainages, excessive dust accumulation on vegetation that could result in the degradation or loss of some plant species, and soil compaction around remaining trees. Construction-related activities could have substantial effects on plant and wildlife habitat, and together, would be considered a significant impact. **Mitigation Measures 5.3-12 through 5.3-18** would reduce these construction-related impacts to less than significant.

## MITIGATION MEASURES

### Direct Impacts

- 5.3-1:** Coastal sage scrub and chaparral communities that are disturbed by construction of the proposed project shall be restored on a 1:1 ratio (therefore, 22.6 acres of coastal sage scrub and 14.5 acres of chaparral) on open space areas on the project site or on other available property. A restoration plan shall be completed and specifies, at a minimum, the following: (1) the location of mitigation sites; (2) the quantity and species of plants to be planted; (3) procedures for creating additional habitat; (4) methods for the removal of non-native plants; (5) a schedule and action plan to maintain and monitor the enhancement/restoration area; (6) a list of criteria and performance standards by which to measure success of the mitigation sites; (7) measures to exclude unauthorized entry into the riparian creation/enhancement areas; and (8) contingency measures in the event that mitigation efforts are not successful. This restoration plan shall be completed prior to construction of the proposed project.
- 5.3-2:** The Coast Prickly Pear Succulent Scrub community shall be replaced on a 1:1 ratio on the project site. Therefore, 0.09 acre of Coast Prickly Pear Succulent Scrub shall be planted on the project site.

The restoration of this plant community shall be described in a restoration plan along with the replacement of coastal sage scrub and chaparral communities prior to project construction as described in Mitigation Measure 5.3-1 above.

- 5.3-3:** The Scalebroom Scrub community shall be replaced where it is temporarily impacted by the installation of stormwater pipes (0.04 acre). Once installation of the stormwater pipes is completed, Scalebroom Scrub shall be planted on the fill that will cover the pipes to replace the Scalebroom Scrub community on a 1:1 ratio.
- 5.3-4:** Active nests of native bird species are protected by the Migratory Bird Treaty Act (16 U.S.C. 704) and the California Fish and Game Code (Section 3503). If activities associated with construction or grading are planned during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Coopers hawks or hummingbirds) and from mid-March through September for most bird species, the applicant shall have a qualified biologist conduct surveys for active nests. To determine the presence/absence of active nests, pre-construction nesting bird surveys shall be conducted weekly beginning 30 days prior to initiation of ground-disturbing activities, with the last survey conducted no more than 3 days prior to the start of clearance/construction work. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than 3 days have elapsed between the survey and ground-disturbing activities.

Surveys shall include examination of trees, shrubs, and the ground for nesting birds. Several bird species such as killdeer and night hawks are known to nest on bare ground. Protected bird nests that are found within the construction zone shall be protected by a buffer deemed suitable by a qualified biologist, and verified by the California Department of Fish and Game. Typically, a 300-foot buffer is required for most species and a 500-foot buffer for raptor species. Buffer areas shall be delineated with orange construction fencing or other exclusionary material that would inhibit access within the buffer zone. Installation of the exclusionary material delineating the buffer zone shall be verified by a qualified biologist prior to initiation of construction activities. The buffer zone shall remain intact and maintained while the nest is active (i.e., occupied or being constructed by the adults bird(s)) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist.

- 5.3-5:** Oak trees to be removed on the project site shall be replaced by purchasing new replacement trees according to the City of Santa Clarita Planning Department/Oak Tree Specialist rather than relocating oak trees from other portions of the project site. The Oak Tree Mitigation Plan proposed by the applicant shall reflect the replacement with new oak trees rather than relocation



of existing oak trees on the project site. After review and approval by the City of Santa Clarita Planning Commission, the Oak Tree Mitigation Plan shall be implemented by the applicant.

**5.3-6:** Except for City-approved encroachments as specified in the approved Oak Tree Mitigation Plan, construction impacts to tree protection zones shall be avoided by the following measures:

- Protective fencing must be installed for the protection of all oak trees as needed. Install a fence a minimum of 5 feet in height and 5 feet beyond the end of the branches (dripline). Stakes shall be strong enough to secure the fence for the duration of the project.
  - The fence is to remain in place at all times. A gate is necessary for tree maintenance personnel. No building materials or equipment is to be stored within the fenced area. No temporary buildings are permitted within the tree protection zone.
- If the governing agency allows trenching within a tree protection zone, the project arborist must be present and properly directing trenching work to reduce impacts to the tree. Trenching must be performed with hand tools or The Air Spade, which is a tool that uses compressed air to remove and break up soil without damaging roots.
  - When installing utility lines (gas, water, landscape irrigation, etc.), if trenching is to occur within the protection zone of any tree, the project arborist must be present to help protect the interest of the trees.
- The project consulting arborist shall be present during all grading operations within tree protection zones (TPZ). The TPZ is defined as the end of the branches (dripline) plus 5 feet. Hand grading, with hand tools only, is required within the TPZ.
- Any root pruning, if necessary, shall be performed under the direction of the project's consulting arborist.
- Disposing of waste such as cement, concrete, petroleum products, paint, or any other material that may be toxic to plants shall not be permitted on site.
- If questions arise regarding any action that may have a negative impact on an oak tree, the project arborist shall be contacted and consulted with before any such action occurs.
- No equipment is to be used within the TPZ. Any digging, excavation, grading, or trenching within the TPZ should be done by hand in the presence of the project Oak Tree Consultant.
- Any and all work within TPZs must be monitored by the Oak Tree Consultant as required by the governing agency.

**5.3-7:** The applicant shall retain a qualified biologist with a CDFG Scientific Collection Permit and Memorandum of Understanding to conduct preconstruction surveys for the California Species of Special Concern that have the potential to occur within the project impact area. These wildlife species include silvery legless lizard, coast horned lizard, coastal western whiptail, coast

patch-nosed snake, southern grasshopper mouse, San Diego desert woodrat, and San Diego black-tailed jackrabbit. All special-status wildlife species observed within the project site during preconstruction surveys shall be relocated, at the approval of the City and CDFG, to an approved site with suitable habitat for these species. Surveys and relocation of wildlife may occur prior to construction; however, focused surveys must occur within 30 days prior to construction to ensure that no special-status wildlife is present within the project site during construction. Survey and relocation methods shall be approved by CDFG prior to commencement of grading.

**5.3-8:** Prior to project construction, the following is required to mitigate impacts to jurisdictional resources:

- A delineation and functional analysis of all waters, wetlands, and riparian corridors on the project site shall be conducted, and jurisdictional areas shall be confirmed by ACOE and CDFG.
- Areas of impact proposed by the project shall be calculated and permits for these proposed impacts shall be obtained (the discharge of fill into ACOE jurisdictional areas will require a permit pursuant to Section 404 of the Clean Water Act and a 401 Certification from the State Water Resources Control Board, and any modification to a streambed, including removal of riparian vegetation, will require a streambed alteration agreement from CDFG pursuant to Section 1600 of the California Fish and Game Code).
- A riparian mitigation plan shall be created for impacts to waters and streambeds on the project site. Impacts to waters of the US under ACOE jurisdiction typically require a 3:1 mitigation area, and impacts to streambeds under CDFG jurisdiction typically require a 5:1 mitigation area. Mitigation can be completed on site or off site. The mitigation plan must be approved by ACOE and CDFG as part of the permit approvals, and shall be implemented concurrently with project construction.

## Indirect Impacts

### *Increased Human and Domestic Animal Presence*

**5.3-9** Fencing and signage shall be constructed and maintained by the Homeowner's Association to deter residents and their pets from entering open space areas, except on designated trails.

- Fencing (i.e., ranch-rail) shall be constructed between the edge of the development area and open space area to deter humans and domestic animals from entering open space habitat areas.
- Native shrubs such as hoary-leaf ceanothus, Mexican elderberry, Nevin's barberry, poison oak, and coast prickly pear shall be planted along the fence to further deter access. Final fence design shall be approved by CDFG and the City of Santa Clarita Community Development

Department. Fencing will not be placed within the ACOE or CDFG jurisdictional areas of the site.

- Signage shall encourage that human access into the open space areas occur only in designated locations (i.e., existing and future trails). All motorized vehicles shall be prohibited from entering the preserved natural open space areas with the exception of emergency or maintenance vehicles.
- Prohibitions against human, domestic animal, and motorized vehicle use in preserved natural open space areas shall be established by ordinance and/or the covenants conditions and restrictions (CC&Rs).

### ***Increase in Populations of Non-Native Species***

**5.3-10:** The landscaping plan(s) within common areas of the project shall be reviewed by a qualified botanist, who shall recommend appropriate provisions to prevent invasive plant species from colonizing in natural areas. These provisions may include the following: (a) review and screening of proposed plant palette and planting plans to identify and avoid the use of invasive species; (b) weed removal during the initial planting of landscaped areas; and (c) the monitoring for and removal of weeds and other invasive plant species as part of ongoing landscape maintenance activities. In addition, the college and residents shall be encouraged to plant non-invasive plant species within private yards. A list of plants to prohibit shall be developed by a qualified botanist and included in the CC&Rs and/or distributed by the homeowners association in the form of an informational brochure to home buyers. A list of invasive plant species developed by Impact Sciences is included in **Appendix 5.3**.

### ***Lighting and Glare***

**5.3-11:** Covenants, conditions, and restrictions (CC&Rs) for the proposed condominiums shall include the following lighting requirements:

- All street, residential, and parking lot lighting shall be downcast luminaries or directional lighting with light patterns directed away from natural areas.
- Exterior lighting within the residential areas shall be limited to low voltage, and the use of low pressure sodium (LPS) lamps shall be encouraged.
- Security lighting shall be installed with motion detectors to ensure that light is only available when needed.

### ***Construction-Related Activities***

The following guidelines shall be implemented to minimize impacts on remaining biological resources on the site as a result of construction and grading activities and to ensure that potential impacts on these resources will remain less than significant.

**5.3-12:** A City-approved biologist shall be retained by the applicant as a construction monitor to ensure that incidental construction impacts on retained biological resources are avoided or minimized. Responsibilities of the construction monitor shall include the following:

- Attend all pre-grading meetings to ensure that the timing and location of construction activities do not conflict with mitigation requirements.
- Conduct meetings with the contractor and other key construction personnel, describing the importance of restricting work to within the project boundaries and outside of the preserved areas. The monitor shall also discuss staging/storage areas for construction equipment and materials. The biological monitor shall investigate all on site storage areas to minimize impacts to biological resources.
- Guide the contractor in marking/flagging the construction area, in accordance with the final approved grading plan. Any construction activity areas immediately adjacent to special-status plant populations or other special-status resources may be directed to be flagged or temporarily fenced at the discretion of the monitor.
- Periodically and routinely visit the site during construction to coordinate and monitor compliance with the above provisions.

**5.3-13:** The construction contractor shall install temporary erosion control measures to reduce impacts to and protect on site drainages from excess sedimentation, siltation, and erosion. These measures shall consist of minimization of existing vegetation removal; the use of temporary soil covers, such as hydroseeding with native species, mulch/binder and erosion control blankets to protect exposed soil from wind and rain erosion; and/or the installation of silt fencing, coirs, berms, and dikes to protect storm drain inlets and drainages.

**5.3-14:** No changing of oil or other fluids, or discarding of any trash or other construction waste materials shall occur on the project site. Vehicles carrying supplies, such as concrete, shall not be allowed to empty, clean out, or otherwise place materials into natural areas on or immediately adjacent to the site.

**5.3-15:** Any equipment or vehicles driven and/or operated within or adjacent to drainages shall be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. No equipment maintenance shall be conducted within the drainage

channels or within 50 feet of channels. (Fuel-powered vehicles and equipment shall not be left idling or operated beyond periods need to accomplish approved tasks.)

- 5.3-16:** Construction personnel shall be prohibited from entry into areas outside the designated construction area, except for necessary construction related activities, such as surveying. All such construction activities in or adjacent to remaining open space areas shall be coordinated with the project biologist.
- 5.3-17:** Standard dust control measures of the South Coast Air Quality Management District shall be implemented to reduce impacts on nearby plants and wildlife. This includes a variety of options to reduce dust including replacing ground cover in disturbed areas as quickly as possible, watering active sites regularly, and suspending all excavating and grading operations during periods of high winds.
- 5.3-18:** Upon completion of construction, the contractor shall be held responsible to restore any haul roads, access roads, or staging areas that are outside of approved grading limits. This restoration shall be done in consultation with the project biologist.

## CUMULATIVE IMPACTS

The proposed project would contribute to the projected urban development in the region. Increasing urbanization of the area will impact biological resources by reducing total habitat area. The project site is currently surrounded by development on all sides and Newhall Creek is the only natural corridor to other undeveloped habitats. The proposed project would temporarily impact this corridor, adjacent to Newhall Creek, with the installation of stormwater pipes and a basin. However, once the stormwater facilities are installed, this creek corridor would remain as open space, and therefore the project would not independently have a significant impact on regional open space.

The loss of approximately 36 acres of sage scrub and chaparral habitat and 2 acres of coast live oak woodland, while somewhat isolated from other larger habitat areas, contributes to the cumulative loss of this habitat for a variety of common and special-status wildlife species, including the potential foraging coastal California gnatcatcher, within the region. Consequently, the loss of this habitat as a result of implementation of the proposed project and other related projects within the City of Santa Clarita represents a significant cumulative impact.

## **CUMULATIVE MITIGATION MEASURES**

Although **Mitigation Measure 5.3-1** requires the off-site preservation from development of coastal sage scrub and chaparral habitats to compensate for the loss of coastal sage scrub and chaparral habitats on the project site, the project still contributes to the cumulative loss of these plant communities and open space in the Santa Clarita region. There is no mitigation that would reduce the significance of this cumulative impact to the coastal sage scrub habitat and open space.

## **UNAVOIDABLE SIGNIFICANT IMPACTS**

### **Project Impacts**

All potentially significant project-level impacts on biological resources identified in this draft EIR will be reduced to a less than significant level with successful implementation of all identified mitigation measures.

### **Cumulative Impacts**

The proposed project's cumulative impact to the coastal sage scrub habitat in the Santa Clarita region is significant and unavoidable.