Dudek and Associates, Inc., "Biological Resources Technical Report for the Valencia Commerce Center, Los Angeles County, California" (2006; 2006D)



# ological Resources Technical Report Valencia Commerce Center Los Angeles County, California



OCTOBER 2006

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# **BIOLOGICAL RESOURCES TECHNICAL REPORT**

for the

# VALENCIA COMMERCE CENTER Los Angeles County, California

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# **OCTOBER 2006**

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# SUMMARY OF FINDINGS

Dudek conducted biological surveys of the 357-acre Valencia Commerce Center Site in August and September 2006 to assess existing conditions, map vegetation communities and land covers and determine the potential for special-status plants and wildlife to exist onsite. Vegetation community classifications used in this report primarily follow the *Vegetation Classification and Mapping Program, List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG 2003) with a few exceptions. In certain instances, the vegetation communities observed in the field did not match the vegetation communities described by CDFG (2003). In these instances, Dudek developed additional vegetation community classifications.

Dudek conducted botanical surveys for special-status plant species annually from 2002 through 2005. Botanical surveys of the site were conducted between April and August of each year. More than 900 field-hours (90 field-days) were spent conducting botanical surveys within the study area over the four years that Dudek conducted surveys. Surveys were conducted in teams of two or more biologists, with at least one senior-level botanist included with each team. Biologists were able to observe reference populations of the state-listed endangered San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*; SFVS) and other special-status plant species in order to ensure flowering status and develop a search-image prior to conducting surveys of the Entrada site. Surveys focused on the identification and location of SFVS. Additional special-status plant species observed during SFVS surveys, including California Native Plant Society (CNPS) List 1B and 4 species, were also recorded.

Dudek conducted wildlife surveys in September 2006. All wildlife species detected on site were recorded. All vegetation communities and land covers on site were surveyed for potential to support special-status wildlife species. Ecological Sciences (2005) also conducted wildlife surveys.

# 1.0 INTRODUCTION

The purpose of the Biological Resources Technical Report is to describe the existing vegetation communities and land covers and survey results for special-status plant and animal species recognized as special-status by local, state, or federal resource agencies and/or environmental organizations on the Valencia Commerce Center (VCC) project site located in northwestern Los Angeles County. Dudek conducted biological surveys of the VCC in July and September 2006 to assess existing conditions, map vegetation communities and land covers and determine the potential for special-status plants and wildlife to exist onsite. In addition, Dudek has conducted rare plant surveys for the state-listed San Fernando Valley Spineflower (*Chorizanthe parryi* var. *Fernandina*; SFVS) on the site annually since 2002.

# 2.0 SITE DESCRIPTION

The 357-acre VCC study area is located in an unincorporated portion of the Santa Clara River Valley in northwestern Los Angeles County (*Figure 1*). The VCC site lies roughly in the northwest corner of the junction of Interstate 5 (I-5) and State Route 126 (SR-126), east of Commerce Center Drive (*Figure 2*). The northwestern edge of the City of Santa Clarita is located east of I-5 and the study area.

Historically Newhall Land (Newhall) leased out portions of the VCC study area for sand and gravel mining, cattle grazing, and agricultural operations; only agricultural operations are currently ongoing. Southern California Edison and Southern California Gas Company also have distribution lines and access roads within easements onsite.

# 2.1 Topography

The VCC study area is dominated by north/south trending ridges that lie north of Castaic Creek, near the confluence with Hasley Canyon. Site elevations range from just under 1,000 feet above mean sea level (AMSL) in the Castaic Creek bottom to just over 1,100 feet AMSL at the top of the north central ridge (*Figure 2*). The ridge is generally rounded at the top with slopes that vary from steep to gentle. In addition to the ridge, Castaic Creek and Hasley Canyon wash areas in the VCC study area contain numerous benches and braided channels with associated riparian/wash scrub vegetation.







Valencia Commerce Center Biological Resources Report Vicinity Map

2

# 2.2 Geology and Soils

Geologically, the VCC study area is located within the Transverse Range geomorphic province of southern California in the eastern portion of the Ventura depositional basin. This basin "was produced by tectonic downwarping in the geologic past to produce a large-scale synclinal structure in which a thick sequence of Cenozoic sediments has accumulated. These sediments have been lithified into a sequence of sedimentary rock that has subsequently been uplifted, tilted, and tectonically deformed (Allen E. Seward 2002, 2004)." The Holser fault traverses the site (Allan E. Seward 2002, 2004).

Soils onsite include: Castaic-Balcom silty clay loams (30 to 50 percent) eroded; Cortina sandy loam (zero to two percent slopes); Cortina sandy loam (two to nine percent slopes); Hanford sandy loam (zero to two percent slopes); Hanford sandy loam (two to nine percent slopes); Metz loamy sand (zero to two percent slopes); River wash, sandy alluvial land; Sorrento loam (two to five percent slopes); and Zamora loam (two to nine percent lopes) (USDA 1969).

# 3.0 METHODS AND SURVEY LIMITATIONS

Data regarding biological resources present in the VCC study area were obtained through a review of pertinent literature and through field reconnaissance; both are described in detail below.

# 3.1 Literature Review

Dudek has conducted special-status plant surveys on the VCC study area annually since 2002. The literature search used for general floristic and special-status botanical resources present or potentially present in the VCC study area are described in the 2006 Sensitive Plant Survey Results for the Valencia Commerce Center Site, Los Angeles County, California (Dudek 2006). General information regarding wildlife species present in the region was obtained from Stebbins (2003) for reptiles and amphibians, American Ornithologists' Union (2005) for birds, Jones et al. (1997) for mammals, and Emmel and Emmel (1973) for butterflies. Guthrie (2006) was consulted for information on special-status bird species and Ecological Sciences (2005) was consulted for information on arroyo toad (Bufo californicus) along Castaic Creek. General information regarding vegetation communities were obtained from Holland (1986) and Sawyer and Keeler-Wolf (1995). Plant species nomenclature follows Hickman (1993).



# 3.2 Field Reconnaissance Methods

### 3.2.1 Resource Mapping

Vegetation communities and land covers were mapped in the field directly onto a 200-scale (1" = 200') false-color digital orthographic map (AirPhoto USA 2005) of the VCC study area. These boundaries and locations were digitized by Dudek Geographic Information Systems (GIS) technician Mark McGinnis using ArcGIS software.

Vegetation community and land cover classifications used in this report primarily follow the *Vegetation Classification and Mapping Program, List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG 2003) with a few exceptions. In certain instances, the vegetation communities observed in the field did not match the vegetation communities described in CDFG (2003). In these instances, Dudek developed additional site-specific vegetation community classifications, which are described as "modified" in the vegetation descriptions in *Section 4.1* below.

### 3.2.2 Flora

All plant species encountered during the special-status plant field surveys (see below) were identified and recorded. Those species that could not be identified immediately were brought into the laboratory for further investigation. Latin and common names of plants follow *The Jepson Manual* (Hickman 1993) or other recent published taxonomic treatments. Where not listed in Hickman (1993), common names were taken from Abrams (1923). Where not found in this reference, a variety of sources were used (*e.g.*, Dale 1986; Roberts 1998).

#### 3.2.3 Fauna

The wildlife survey was conducted by the field biologist walking a meandering transect throughout the VCC study area, surveying all portions of the study area, to ensure that virtually 100 percent visual coverage was obtained. Wildlife species detected during the field survey by sight, calls, tracks, scat, or other observable signs were recorded. Binoculars (7 x 50 power) were used to aid in the identification of observed wildlife. At regular intervals the biologist stopped, and listened for wildlife vocalizations. All wildlife species detected in the VCC study area were surveyed for potential to support special-status wildlife species. See also Ecological Sciences (2005).



#### 3.2.4 Special-status/Regulated Biological Resources

Special-status biological resources are those defined as follows: (1) species that have been given special recognition by federal, state, or local resource agencies and environmental organizations due to limited, declining, or threatened population sizes; (2) species and vegetation/land cover types recognized by local and regional resource agencies as special-status; (3) habitat areas or vegetation communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; and (4) wildlife corridors and habitat linkages. Regulated biological resources may or may not be considered special-status, but are regulated under local, state, and/or federal laws.

Dudek conducted botanical surveys for special-status plant species annually from 2002 through 2005. Botanical surveys of the site were conducted between April and August of each year. More than 900 field-hours (90 field-days) were spent conducting botanical surveys within the VCC study area over the four years that Dudek conducted surveys. Surveys were conducted by teams of two or more biologists, with at least one senior-level botanist included on each team. Biologists were able to observe reference populations of the state-listed endangered SFVS and other special-status plant species in order to confirm flowering and to develop a search-image prior to conducting surveys of the VCC study area. Surveys focused on the identification and location of SFVS. Additional special-status plant species observed during SFVS surveys, including California Native Plant Society (CNPS) List 1B and 4 species, were also recorded.

A complete description of field surveys procedures for special-status plants are described in *Sensitive Plant Survey Results for Valencia Commerce Center, Los Angeles County, California* (Dudek 2002, 2004a, 2004b and 2006). *Table 1* lists the dates, conditions, and survey focus for each of the surveys.

Date Biologists		Purpose
2002-2005	Various Dudek staff	Special-status plant surveys
August 3, 2006 Sherri Miller		Vegetation mapping
August 8, 2006 Sherri Miller		Vegetation mapping
September 1, 2006	Paul Lemons	General wildlife survey

# TABLE 1Survey Schedule & Personnel

#### 3.2.5 Survey Limitations

Surveys for special-status plants were conducted from April through August. The timing of the surveys was coincident with the blooming period for SFVS and other early blooming annual species. This maximized the potential for detection of SFVS and other special status plants during the survey effort.

The wildlife survey was conducted in early September 2006 by Dudek (Table 1). Limitations of the survey include a seasonal and diurnal bias and the absence of trapping for small mammals, reptiles, and amphibians. The survey was conducted during the daytime to maximize the detection of most animals. Birds represent the largest component of the vertebrate fauna, and because most birds are active in the daytime, diurnal surveys maximize the number of observations of this group. In contrast, daytime surveys usually result in few observations of mammals, many of which may only be active at night. In addition, many species of reptiles and amphibians are secretive in their habits and are difficult to observe using standard meandering transects. The avian surveys conducted by Guthrie in Spring and early Summer 2006 included observations of breeding birds and would be expected to also include migrant or winter resident bird species. Arroyo toad surveys were conducted in the appropriate season along Castaic Creek by Ecological Sciences (2005).

The surveys were conducted during daylight hours under weather conditions that did not preclude observation of special-status plant species (*e.g.*, surveys were not conducted during heavy fog or rain).

# 4.0 **RESULTS OF SURVEYS**

# 4.1 Botany – Vegetation Communities and Floral Diversity

Native and naturalized vegetation communities within the VCC study area are representative of those found in the Santa Susana, Topatopa, and Liebre mountains and the Santa Clara River and Castaic Creek ecosystems. The most dominant vegetation communities in riparian areas are herbaceous wetland, river wash, mulefat scrub and southern cottonwood-willow riparian forest. Dominant upland vegetation communities in the VCC study area are California sagebrush scrub and California annual grassland. These vegetation communities and land covers are described below. Included (where applicable) are the codes corresponding to the *Vegetation Classification and Mapping Program, List of California Terrestrial Natural Communities Recognized by the* 

*California Natural Diversity Database* (CDFG 2003). Their acreages are presented in *Table 2*, and their distribution is shown in *Figure 3*.

Vegetation Community	Acres
California Annual Grassland	76.5
California Sagebrush Scrub	35.6
California Sagebrush Scrub - California Buckwheat	6.0
Herbaceous Wetland	9.6
Mulefat Scrub	0.5
River Wash	45.8
Southern Cottonwood - Willow Riparian Forest	62.0
Agriculture	46.1
Developed	25.7
Disturbed Land	49.3
TOTAL	357.0

 TABLE 2

 On-Site Vegetation Communities and Land Cover Types

### 4.1.1 California Annual Grassland (42.040.00)

California annual grassland is characterized by a mixture of weedy, introduced annuals, primarily grasses. It may occur where disturbance by maintenance (mowing, scraping, discing, spraying, etc.), grazing, repetitive fire, agriculture, or other mechanical disruption have altered soils and removed native seed sources from areas formerly supporting native vegetation. Onsite California annual grassland consists of various annual non-native grasses including wild oat (*Avena fatua*), slender oat (*Avena barbata*), and bromes (*Bromus diandrus, B. madritensis* ssp. *rubens, B. hordeaceus*). Other herbaceous species include black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), Russian thistle (*Salsola tragus*), and dove weed (*Eremocarpus setigerus*). Some of these grasslands include occasional California sagebrush scrub species as described below. California annual grasslands may support special-status plant and animal species and provide foraging habitat for raptors (birds of prey).

# 4.1.2 California Sagebrush Scrub (32.010.00)

California sagebrush scrub is a native plant community characterized by a variety of soft, low, aromatic, drought-deciduous shrubs, such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), California bush sunflower (*Encelia californica*), and sages (*Salvia spp.*), with scattered evergreen shrubs, including lemonadeberry (*Rhus integrifolia*), laurel sumac (*Malosma laurina*), and toyon (*Heteromeles arbutifolia*). It





**Vegetation Communities** 



typically develops on south-facing slopes and other xeric situations. Coastal sage scrub is considered a vegetation community because of its depleted nature and the large number of special-status plant and wildlife species that it supports (Holland 1986).

On-site California sagebrush scrub is dominated by a mixture of California sagebrush, black sage (*Salvia mellifera*), purple sage (*Salvia leucophylla*), and California buckwheat. Other species present within this community include our lord's candle (*Yucca whipplei*), slender tarweed (*Hemizonia fasiculata*), deerweed (*Lotus scoparius*), black mustard, and tocalote, with scattered chaparral species including chamise (*Adenostoma fasciculatum*), sugar bush (*Rhus ovata*), toyon, and chaparral bushmallow (*Malacothamnus fasciculatus*). California sagebrush scrub occurs on site on dryer slopes, generally south or west facing.

One California sagebrush scrub subcommunity also was mapped on site. California Sagebrush Scrub-California Buckwheat was mapped in areas where California buckwheat was the dominant plant species interspersed with California sagebrush and other species mentioned above.

#### 4.1.3 Herbaceous Wetland

Herbaceous wetlands occur within the banks of the Santa Clara River or its tributaries. Common species within herbaceous wetlands include Hooker's evening primrose (*Oenothera elata*), cocklebur (*Xanthium strumarium*), and immature mulefat (*Baccharis salicifolia*), willows, and Fremont cottonwood (*Populus fremontii*) seedlings and saplings.

#### 4.1.4 Mulefat Scrub (63.510.00)

Mulefat scrub is a relatively low (2-3 m), dense, shrubby plant community that occurs in riparian vegetation, edges of catchment basins, and in canyons. It is dominated by mulefat (*Baccharis salicifolia*), and may contain a small number of arroyo willow (*Salix lasiolepis*), upland shrubs, and facultative herbs. Mulefat scrub is a seral community that occurs mainly along major drainages and floodplains where the riparian vegetation is open or disturbed. Frequent flooding and/or scouring apparently maintain this community in an early successional state (Holland 1986). Characteristic plant species in this community include mulefat, coyote brush (*Baccharis pilularis*), western ragweed (*Ambrosia psilostachya*), and a few other obligate or facultative wetland species.



#### 4.1.5 Southern Cottonwood Willow Riparian Forest (61.130.02)

Southern cottonwood willow riparian forest is a tall, open, broad-leafed winter deciduous riparian forest dominated by Fremont cottonwood and several different species of willow. It occurs in frequently overflowed lands along rivers and streams.

#### 4.1.6 River Wash

River wash is a land cover type that occurs within washes of the Santa Clara River and its tributaries that are unvegetated or sparsely vegetated with seedlings, sparse grasses, and forbs. River wash is subject to scouring by seasonal storm flows.

#### 4.1.7 Agriculture

Agriculture refers to areas where irrigated row and field crops are being grown [*i.e.*, intensive agriculture]. This area may support grass species such as barley (*Hordeum* spp.) and wild oat (*Avena* spp.). This land has little biological resource value because it provides very limited habitat value for most native species. However, this area may supply grain and water for native and migratory birds. Raptors also may hunt for rodents and rabbits in agriculture.

#### 4.1.8 Disturbed Land

Disturbed land typically occurs in areas where soils have been recently or repeatedly disturbed by grading or compaction resulting in the growth of very few native perennials, and are usually dominated by bare ground or non-native dicotyledonous species including filaree (*Erodium* spp.), black mustard, thistles (*e.g., Cynara cardunculus, Carduus pynocephalus,* and *Centaurea melitensis*), dove weed, and others. Within the VCC study area, disturbed land occurs on permeable surfaces without vegetation, as well as with weedy annual non-native vegetation including Russian thistle, tocalote, doveweed, black mustard, and bull thistle (*Cirsium vulgare*).

#### 4.1.9 Developed Land

Developed land refers to areas supporting manmade structures including homes, yards, roadways, and other highly modified lands supporting structures associated with dwellings or other permanent structures. Within the VCC study area, developed land refers to existing roads.

#### 4.1.10 Floral Diversity

The VCC study area is situated at the nexus of the Transverse, Coast, and Sierra Nevada ranges; the Mojave Desert; and coastal plains (Hickman 1993). Ecotone areas such as this are often characterized by higher biological diversity than similar-sized areas within the core of a physiographic region (Boyd 1999), and as such, a high diversity of plant species is expected. A total of 342 plant species was identified within the VCC study area over the five years of surveys. Of these, 262 species (77 percent) are native to the region and 80 species (23 percent) are non-native. The cumulative list of plant species identified on the site in 2002, 2003, 2004, 2005 and 2006 is provided as *Appendix A*.

# 4.2 Zoology – Wildlife Diversity

#### 4.2.1 General Wildlife

The VCC study area supports habitat for a large number of upland and wetland wildlife species. The wide range of upland and riparian vegetation communities found in the study area provide diverse habitats for wildlife species. Vegetation communities providing upland wildlife habitat include: California sagebrush scrub, California sagebrush scrub with California buckwheat dominant, and California annual grassland. Castaic Creek supports a variety of riparian plant communities, including alluvial scrub, herbaceous wetland, mulefat scrub, southern cottonwood willow riparian forest, and river wash. With the exception of agriculture, disturbed and developed land, which are regularly maintained, these vegetation communities are suitable for supporting a variety of wildlife species. Twenty-nine species of wildlife surveys in the area (*i.e.*, Guthrie 2006) in and around VCC suggest a wildlife species diversity that likely is much greater than observed, especially of bird species during the breeding season. *Figure 4* depicts the locations of special-status wildlife species observed onsite.

#### 4.2.2 Birds

Thirty species of birds were observed during the 2006 surveys by Dudek and Guthrie. Some of the species observed on the site include on site include turkey vulture (*Cathartes aura*), Cooper's hawk (*Accipiter cooperii*), California quail (*Callipepla californica*), killdeer (*Charadrius vociferus*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), western kingbird (*Tyrannus verticalis*), and great egret (*Ardea alba*). For a complete list of birds observed in the VCC study area, see *Appendix B*.



Valencia Commerce Center Biological Resources Report **Special Status Species** 



#### 4.2.3 Reptiles and Amphibians

One reptile species was observed on the site: western fence lizard (*Sceloporus occidentalis*). Other reptile and amphibian species that may occur in the VCC study area based on available habitat include side-blotched lizard (*Uta stansburiana*), California whipsnake (*Masticophis lateralis*), gopher snake (*Pituophis melmoleucus*) western rattlesnake (*Crotalus viridis*), western toad (*Bufo boreas*), and treefrogs (*Hyla* spp.).

#### 4.2.4 Mammals

Five species of mammals were recorded on the site: cottontail (*Sylvilagus* ssp), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*). Other mammal species that may commonly occur on site include gray fox (*Urocyon cinereoargenteus*), common raccoon (*Procyon lotor*), long-tailed weasel (*Mustela frenata*), and several rodent species (*Peromyscus* spp., *Neotoma* spp., *Baccharis salicifolia*, etc)

#### 4.2.5 Butterflies and Moths

No species of butterflies or moths were recorded in the VCC study area, likely due to late summer timing of survey. However, 24 species of butterflies were recorded during a butterfly survey on the Entrada site, the core of which is about a mile south of the VCC study area (Compliance Biology 2004). These included checkered white (*Pontia protodice*), California white (*Pontia sisymbrii*), monarch (*Danaus plexippus*), buckeye (*Junonia coenia*), west coast lady (*Vanessa annabella*), and painted lady (*Vanessa cardui*). It is likely that many of these species are present in the VCC study area.

# 4.3 Special-Status Biological Resources

The following resources are discussed in this section: (1) plant and animal species present in the project vicinity that are given special recognition by federal, state, or local conservation agencies and organizations owing to declining, limited, or threatened populations, that are the result, in most cases, of habitat reduction; and (2) habitat areas that are unique, are of relatively limited distribution, or are of particular value to wildlife.

Sources used for determination of special-status biological resources are as follows:

• Wildlife: USFWS 2002 and CDFG California Natural Diversity Database (CNDDB) (CDFG 2005a and b);

• Plants: CDFG CNDDB (CDFG 2005c and d) and CNPS (2001) (including any revisions provided on <u>http://www.cnps.org/inventory</u>, accessed November 2005 and October 2006); and habitats, CDFG (2003).

#### 4.3.1 Special-Status Plant Species

Special-status plant species observed within the VCC study area during the course of 2002 through 2005 surveys include SFVS, slender mariposa lily (*Calochortus clavatus* var. gracilis) and Coulter's goldfields (*Lasthenia glabrata* ssp. coulter). Coulter's goldfields is considered special status by the County of Los Angeles, but may be an introduced species. These and other special-status species that have the potential to occur within the VCC study area, based on the presence of suitable habitat and soils, are listed in *Table 3*. The special-status species listed in *Table 3* are confined primarily to those species listed by the state and federal government as threatened or endangered, those species proposed for state and/or federal listing or candidates, and those plant species found on Lists 1A, 1B, or 2 of the *CNPS Inventory of Rare and Endangered Plants of California* (CNPS 2001). A number of species found on CNPS Lists 3 or 4 also have the potential to occur on site (*e.g., Calystegia peirsonii, Juglans californica*); however, due to their relatively low sensitivity level, CNPS Lists 3 or 4 plants are only discussed in the following sections if they were observed in the VCC study area.

Everlasting (*Gnaphalium* sp. *nova*) is an undescribed species and is considered special-status for the purpose of this study.

The species observed during the 2002 through 2005 field surveys are discussed in greater detail below. *Figure 4* depicts the locations of special-status plant species observed onsite.

Other special-status plant species may be present in the VCC study area, but were not observed during the four years in which rare plant surveys were conducted. *Table 3* describes these species and the likelihood of occurrence in the VCC study area.

#### San Fernando Valley Spineflower (Chorizanthe parryi var. fernandina)

San Fernando Valley spineflower is state-listed as endangered, a candidate for federal listing, and a CNPS List 1B species. Until its rediscovery in 1999 at Laskey Mesa on Ahmanson Ranch in Ventura County, it was thought to be extinct. A review of information of historic occurrence of SFVS in the CNDDB indicate that it was previously thought to occur in sandy to gravelly soils of washes, riverbeds, and upland areas primarily on the margins of the San Fernando Valley at the base of the Santa Susana Mountains, San Gabriel Mountains, and the Simi Hills. Munz (1974) provides distribution information to include Orange and San Diego counties.



Scientific	Common	Status Federal/State	CNPS	Primary Habitat Associations/ Life Form/ Blooming Poriod	Presence or Likelihood of Occurrence
Arenaria paludicola	marsh sandwort	FE/SE	1B	dense freshwater marsh/perennial herb/May-August	Not observed during 2002-2006 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; nearest occurrences are in the Santa Ana River and in Santa Barbara. Limited suitable habitat onsite in wash/riparian areas; very low likelihood of occurrence within the study area.
Artemisia tridentata ssp. parishii	Parish's Big sagebrush scrub	None/None	None	Big sagebrush scrub on the margins of drainage channels/perennial shrub/November-August	Co-occurs with Artemisia tridentata ssp. tridentata. Observed within big sagebrush scrub within Newhall Ranch Specific Plan area (NR SPA) and in Salt Creek. Moderate potential to occur within study area. Considered special- status by the County of Los Angeles.
Astragalus brauntonii	Braunton's milk-vetch	FE/None	1B	chaparral, coastal sage scrub, grasslands; often on carbonate substrates/perennial herb/March-July	Not observed during 2002-2006 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; nearest occurrence is in the Simi Hills. Suitable habitat exists onsite. Low to moderate likelihood of occurrence within study area.
Atriplex coulteri	Coulter's saltbush	None/None	1B	coastal sage scrub and grasslands on alkaline or clay substrate/ perennial herb/March-October	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads. Suitable habitat exists onsite in wash/riparian areas. Moderate likelihood of occurrence within study area.
Atriplex serenana var. davidsonii	Davidson's saltscale	None/None	1B	coastal bluff scrub and coastal sage scrub on alkaline substrate/annual herb/May-October	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads. Suitable habitat exists onsite in wash/riparian areas. Low likelihood of occurrence within the study area.
Baccharis malibuensis	Malibu baccharis	None/None	1B	chaparral, coastal sage scrub, cismontane woodland/deciduous shrub/August	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; closest known populations are in the western Santa Monica Mountains near Malibu. Not expected to occur within the study area.
Berberis nevinii	Nevin's barberry	FE/SE	1B	chaparral, coastal sage scrub, riparian scrub, cismontane woodland on sandy or gravelly substrate/evergreen shrub/March-April	Not observed during the 2002 through 2005 field seasons. CNDDB records exist for San Francisquito Canyon at confluence with Santa Clara River; suitable habitat present onsite in wash/riparian areas. Moderate likelihood of occurrence within study area.
Brodiaea filifolia	thread-leaved brodiaea	FT/SE	1B	clay substrate openings in chaparral, sage scrub, and grasslands/perennial herb (geophyte)/March- June	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; nearest occurrence is in San Dimas. Suitable habitat present onsite. Low likelihood of occurrence within study area.

Scientific	Common	Status	CNPS	Primary Habitat Associations/ Life Form/	Presence or Likelihood of Occurrence
Name	Name	Federal/State	List	Blooming Period	in study area
Calochortus clavatus var. gracilis	slender mariposa lily	None/None	18	chaparral and coastal sage scrub/perennial herb (geophyte)/March- May	Identified in two general areas (predominantly steep, north-facing slopes in California sagebrush). The documented population has varied from 116 to 997 individuals between 2003 and 2005. CNDDB records for mouth of Pico Canyon.
Calochortus plummerae	Plummer's mariposa lily	None/None	1B	chaparral, coastal sage scrub, cismontane woodland, grasslands on rocky granitic substrate/perennial herb (geophyte)/May-July	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; however, records exist for the Santa Susana Mountains and Simi Hills. Suitable habitat exists onsite. High likelihood of occurrence within study area.
Calochortus weedii var. vestus	late-flowered mariposa lily	None/None	1B	chaparral, cismontane and riparian woodland/perennial herb (geophyte)/ June-August	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; however, habitat similar to where species occurs in eastern Ventura County is present onsite. Moderate likelihood of occurrence within study area.
Calystegia peirsonii	Peirson's morning-glory	None/None	4	chaparral, coastal sage scrub, cismontane woodland, grassland/ perennial herb/May-June	Commonly observed in chaparral, California sagebrush, and buckwheat scrub in the study area.
Calystegia sepium ssp. binghamiae	Santa Barbara morning-glory	None/None	1A	marshes and swamps/perennial herb/ April-May	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads. Limited suitable habitat present onsite in wash/riparian areas. Low likelihood of occurrence within study area.
Centromadia [=Hemizonia] parryi ssp. australis	southern / tarplant	None/None	1B	mesic edges of marshes in grasslands/annual herb/May-November	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads. Suitable habitat exists onsite in wash/riparian areas. Low likelihood of occurrence within study area.
Cercocarpus betuloides va blancheae	s Island ar. mountain- mahogany	None/None	4	chaparral, closed-cone coniferous forest/evergreen shrub/February-May	Not observed within study area. Occurrences documented from surrounding areas in mixed chaparral. Limited suitable habitat present onsite. Low likelihood of occurrence within study area.
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	FC/SE	1B	coastal sage scrub, sandy soils/annual herb/April-June	Observed onsite over four years of surveys The documented population has varied from 1,471 to 233,155 individuals between 2003 and 2005 within occurrence polygons covering 0.5 acre of the site.
Deinandra [=Hemizonia minthornii	Santa / Susana tarplant	None/SR	1B	chaparral and coastal sage scrub on rocky substrate/deciduous shrub/July-November	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; however, records exist for the Simi Hills and Oat Mountain. Suitable habitat exists onsite. Low likelihood of occurrence within study area.

Scientific Name	Common Name	Status Federal/State	CNPS List	Primary Habitat Associations/ Life Form/ Blooming Period	Presence or Likelihood of Occurrence in study area
Delphinium parryi ssp. blochmaniae	dune larkspur	None/None	1B	maritime chaparral, coastal dunes/ perennial herb/ April-may	Not observed during any of five field seasons although <i>Delphinium parryi</i> ssp. <i>parryi</i> was observed within the study area. No likelihood of occurrence.
Dodecahema leptoceras	slender- horned spineflower	FE/SE	1B	Alluvial scrub on sandy substrate/annual herb/April-June	Not observed during the 2002 through 2005 field seasons. Historic CNDDB records exist for the Newhall or Val Verde quads in alluvial habitat similar to that present onsite in wash/riparian areas. Moderate likelihood of occurrence onsite.
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None/None	1B	clay openings in chaparral and coastal sage scrub, grasslands/ perennial herb/April-June	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads. Suitable habitat present onsite. Low to moderate likelihood of occurrence within study area.
Dudleya cymosa ssp. marcescens	marcescent dudleya	FT/CR	1B	chaparral, often on volcanic substrate/perennial herb (geophyte)/ April-June	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for Newhall and Val Verde quads. Low likelihood due to lack of suitable habitat observed in study area.
Dudleya cymosa ssp. ovatifolia	Santa Monica Mountains dudleya	FT/None	1B	chaparral and coastal sage scrub, often on volcanic substrate/ perennial herb (geophyte)/March-June	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for Newhall and Val Verde quads. Suitable habitat present onsite. Low to moderate likelihood of occurrence within study area.
Dudleya multicaulis	many- stemmed dudleya	None/None	1B	coastal bluff scrub, coastal sage scrub, valley and foothill grassland, rocky, often clay substrate/perennial herb/ April-June	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; closest known occurrences are in Calabasas and San Dimas. Suitable habitat exists onsite. Low to moderate likelihood of occurrence within study area.
Dudleya parva	Conejo dudleya	FT/None	1B	coastal sage scrub and grassland on rocky, gravelly clays/perennial herb/May-June	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads. Suitable habitat exists onsite. Low likelihood of occurrence within study area.
Erodium macrophyllum	round-leaved filaree	None/None	2	cismontane woodland and grasslands on clay substrate/annual herb/March-May	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; however records exist for Simi Valley, and this plant was observed in the hills east of Castaic Lake in 2003. Suitable habitat present onsite; moderate likelihood of occurrence in study area.
<i>Helianthus nuttallii</i> ssp. <i>Parishii</i>	Los Angeles sunflower	None/None	1A	marshes and swamps/perennial herb/ August-October	Not observed within study area during 2005 field season. A <i>Helianthus</i> population, discovered in 2002 at Castaic Spring, on the south side of the Santa Clara River between Middle Canyon and San Jose Flats, was determined by some experts to be this species,

				Primary Habitat	
Scientific	Common	Status	CNPS	Life Form/	Presence or Likelihood of Occurrence
Name	Name	Federal/State	List	Blooming Period	in study area
				<i>J</i>	but determined by other experts not to be this species. Based on pollen electron microscopy and chromosome counts, it is likely that the Newhall <i>Helianthus</i> species is a hybrid between <i>H. nuttallii</i> and <i>H. californicus</i> or an intermediate evolutionary step between the two species (Porter and Fraga 2004). No suitable habitat observed in study area.
Horkelia cuneata var. puberula	mesa horkelia	None/None	1B	chaparral, cismontane woodland, coastal sage scrub on sandy or gravelly substrate/perennial herb/February-December	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads. Suitable habitat present onsite in wash/riparian areas. Low likelihood of occurrence within study area.
Juglans californica	southern California black walnut	None/None	4	chaparral, cismontane woodland, coastal sage scrub, alluvial scrub/ deciduous tree/March- May	One individual observed within chaparral in the study area during 2005 field season.
<i>Lasthenia</i> glabrata ssp. c <i>oulteri</i>	Coulter's goldfields	FSC/None	1B	saltwater marsh and swamps, playas, vernal pools/annual herb/February-June	Observed in one location (approximately 670 square feet in size) within the study area during 2005 surveys. The occurrence contains approximately 75 individuals on a manufactured slope. It may be non-native introduced No records of this subspecies are within Los Angeles or Ventura counties.
Malacothamnus davidsonii	Davidson's bush mallow	None/None	1B	chaparral, coastal sage scrub, riparian woodland/ deciduous scrub/June- January	Not observed during the 2002 through 2005 field seasons. Nearest occurrences are in Van Nuys and Sunland quads. Suitable habitat present onsite. Moderate likelihood of occurrence within study area.
Nama stenocarpum	mud nama	None/None	2	edges of lakes, rivers, ponds, vernal pools/annual/January- July	Not observed during the 2002 through 2005 field seasons. Moderate likelihood of occurrence on banks of Castaic Creek and Hasley Canyon and other mesic areas onsite. No CNDDB records exist for the Newhall or Val Verde quads. Limited suitable habitat present onsite in wash/riparian areas. Low likelihood of occurrence within study area.
Nolina cismontane	chaparral nolina	None/None	1B	chaparral, coastal sage scrub on sandstone or gabbro substrate/ perennial shrub/April-July	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads. Limited suitable habitat present onsite. Low likelihood of occurrence within study area.
Opuntia basilaris var. brachyclada	short-joint beavertail	None/None	1B	chaparral, Joshua tree woodland, Mojavean desert scrub/succulent shrub/ April-June	This variety was identified by Dudek in 2002 within coastal sage scrub at southwest portion of the ridge between Hasley Canyon and Castaic Creek; however, further investigation indicates that the onsite population more

# TABLE 3Special-Status Plant Species Observed orPotentially Occurring at the Valencia Commerce Center

Scientific Name	Common Name	Status Federal/State	CNPS List	Primary Habitat Associations/ Life Form/ Blooming Period	Presence or Likelihood of Occurrence in study area
					closely matches variety <i>racemosa</i> . This species was not mapped in 2005.
Pentachaeta Iyonii	Lyon's pentachaeta	FE/SE	1B	openings in chaparral and coastal sage scrub, grasslands/annual herb/March-August	Not observed during the 2002 through 2005 field seasons and is considered not to occur in the study area. No CNDDB records exist for the Newhall or Val Verde quads; nearest occurrences are in the Simi Valley. Suitable habitat present onsite. Moderate likelihood of occurrence within study area.
Rorippa gambellii	Gambel's watercress	FE/ST	1B	marsh and swamps (freshwater and brackish)/ perennial herb/April-September	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads. Limited suitable habitat present onsite in wash/riparian areas. Very low likelihood of occurrence within study area.
Senecio aphanactis	rayless ragwort	None/None	2	chaparral, coastal sage scrub, cismontane woodland on alkaline substrate/annual herb/January-April	Not observed during the 2002 through 2005 field seasons. Historic CNDDB record for Saugus, south of Santa Clara River. Suitable habitat exists onsite. Moderate likelihood of occurrence within study area.
Sidalcea neomexicana	Salt Spring checkerbloom	None/None	2	chaparral, coastal sage scrub, and playas on alkaline substrate/ perennial herb/March- June	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; suitable habitat exists onsite. Moderate likelihood of occurrence within study area.
Thelypteris puberula var. sonorensis	Sonoran maiden fern	None/None	2	meadows and seeps/perennial herb/ fertile January-September	Not observed during the 2002 through 2005 field seasons. No CNDDB records exist for the Newhall or Val Verde quads; nearest occurrence at Point Dume. Limited suitable habitat present onsite. Low likelihood of occurrence within study area.

#### Legend

SR:

State-listed as rare

•			
FE:	Federally-listed as endangered	CNPS List 1A:	Plants presumed extinct in California
FT:	Federally-listed as threatened	CNPS List 1B:	Plants rare, threatened, or endangered in California and elsewhere
FC:	Federal candidate for listing	CNPS List 2:	Plants rare, threatened, or endangered in California but more common elsewhere
SC:	State candidate for listing	CNPS List 3:	Plants about which we need more information – a review list
SE:	State-listed as endangered	CNPS List 4:	Plants of limited distribution – a watch list
ST:	State-listed as threatened		

Forty-five (45) polygons were identified in the northeastern portion of the survey area. These polygons are depicted in *Figure 4*. Labels for each of the polygons in *Figure 4* correlate with those in *Table 4*, which contains estimates for the numbers of individuals within each polygon.



Year	Estimated Population
2002	Not observed
2003	170,081
2004	1,471
2005	223,155

# TABLE 4SFVS Populations on VCC Site, 2002-2005

Most of the SFVS were found on slopes with a south/southeast facing component in habitat ecotonal between California sagebrush and grasslands, and California buckwheat and grasslands. Elevations of the SFVS polygons on this site range from approximately 1,070 to 1,160 feet AMSL. Vegetative cover in the area of SFVS occurrences ranged from 40 to 90%, but was more commonly between 60 and 70%. The soil type for all mapped SFVS occurrences in the VCC study area consisted of clay loams.

SFVS was first detected at the VCC study area in 2001. Approximately 4,600 individuals were observed in the study area (FLx 2002). SFVS was not observed during surveys conducted in the study area in 2002. In 2003, 170,081 individuals were observed in the study area. In 2004, 1,471 individuals were detected. In 2005, 223,155 individuals were detected (*Table 3*).

#### Slender mariposa lily (Calochortus clavatus var. gracilis)

Slender mariposa lily has no state or federal status, but is a CNPS List 1B.2 plant. It is typically found in chaparral, coastal sage scrub, and grasslands, often on clay, and/or rocky soils. It has been documented to occur at the mouth of Pico Canyon and other canyons in the vicinity (Newhall Quad; CDFG 2004b). Other varieties of this species are documented from southern California: club-haired mariposa lily (*Calochortus clavatus* var. *clavatus*) and pale mariposa lily (*C. clavatus* var. *pallidus*). The club-haired mariposa lily differs in that it is virtually a serpentine endemic (restricted to serpentine soils) and a very robust species, generally attaining a height of one meter. Pale mariposa lily differs in that the petals are a paler yellow, the anthers are paler (yellow to pale purple), and the hairs on the petals are not as knobby or club shaped. Neither the club-haired mariposa lily nor pale mariposa lily is known to have a red line above the nectary on the petal, as is the case with the slender mariposa lily.

Multiple polygons were mapped within the VCC study area by drawing boundaries on aerial photograph field maps around the areas that contained the mariposa lily. The *Calochortus* plants were scattered within these polygons, and estimates of the number of flowering individuals (not total number of individuals) were made based on visual estimations. Geophytes like *Calochortus* 

generally only have a fraction of the plants flower in any given year, and the non-flowering individuals are not as visible.

Within the VCC study area, the slender mariposa lily was found primarily on east and northeastfacing ridges and slopes in California sagebrush, California buckwheat and California annual grasslands. The occurrences were generally mapped in areas of high vegetative cover and a variety of soil types (*e.g.*, gravelly loam, sandy loam, rocky clay). The elevation of occurrences ranges from 1,000 to 1,330 feet AMSL. This species is locally abundant at the VCC study area.

In 2002, a *Calochortus* species was observed onsite, but current-year flowers were not available to confirm the species as slender mariposa lily. In 2003, 995 individuals were observed onsite. In 2004, 116 individuals were observed onsite. In 2005, 997 individuals were observed onsite (*Table 5*).

Year	Estimated Population
2002	Not observed
2003	995
2004	116
2005	997

TABLE 5Slender Mariposa Lily Populations on VCC Site, 2002-2005

#### Coulter's goldfields (Lasthenia glabrata ssp. coulteri)

Coulter's goldfields is a CNPS List 1B.1 plant which had not been documented to occur in the vicinity of the VCC study area (Hickman 1993; CNPS 2006). This variety is documented as being restricted to alkali playas, vernal pools, and some freshwater habitats in Riverside and San Diego counties (CNPS 2006). During the 2005 season, the species was observed in the VCC study area and in the Entrada study area on recently manufactured slopes; apparently applied as part of an erosion control hydroseed mix.

Onsite the plants are growing on a southeast-facing manufactured slope. The area does contain alkali habitat characteristics (silty clay, cracked soils with 10 percent vegetative cover), which are known to support this variety. These plants appear to be a non-native introduction to the site.

#### Peirson's Morning Glory (Calystegia peirsonii)

Peirson's morning-glory has no state or federal status, but is a CNPS List 4 species. This morning-glory is a rhizomatous perennial that typically is found in more desert-like areas (e.g.,



creosote bush scrub, Joshua tree woodland) at elevations which exceed 3,000 feet AMSL, although there are records in the CNDDB for lower elevations in the local area. While never abundant, Peirson's morning-glory is widespread onsite and was observed on virtually all ridges and slopes, weakly climbing over mixed chaparral, California sagebrush, California buckwheat, and in grasslands throughout the 357-acre VCC study area. Due to the widespread nature of Peirson's morning-glory in the VCC study area and its relatively low sensitivity level, it was not mapped.

#### Southern California black walnut (Juglans californica)

Southern California black walnut has no state or federal status, but is a CNPS List 4 *s*pecies. Within its distributional range in southern California, this species is found as scattered occurrences throughout chaparral, cismontane woodlands, and coastal and alluvial scrub habitats (CNPS 2001).

In the VCC study area, one southern California black walnut was found along the southern bank of Castaic Creek, west of the junction of Interstate 5 and State Highway 126. The tree occurred at the edge of willow-cottonwood forest on relatively flat terrain at an elevation of about 1,000 feet.

#### **Gnaphalium** sp. nova (everlasting)

*Gnaphalium* has no state or federal status, but is being treated as a special-status species by the County of Los Angeles. The undescribed species of *Gnaphalium* documented within the study area during the 2004 field season was observed again during the 2005 field season. In 2004, 250 individuals were observed in the portion of Castaic Creek west of the Interstate 5 (I-5) Bridge and east of Commerce Center Drive on secondary alluvial benches. In 2005, the one occurrence (*Figure 4*) consisted of approximately 65 individuals. The vegetation around these plants consists of open alluvial sage scrub vegetation that are sparsely vegetated.

Plants of this unnamed everlasting were previously ascribed to the species *Gnaphalium leucocephalum*, which is not thought to occur west of the Peninsular and Transverse Ranges in California. These specimens, rather, are thought by UC Riverside (UCR) and Rancho Santa Ana Botanic Garden (RSA) botanists to be an undescribed taxon (*Gnaphalium* sp. *nova*). The *Gnaphalium* plants on the Newhall Ranch SPA differ from *Gnaphalium leucocephalum* in stature, pubescence, and phyllary characters.

A search of three herbaria (UCR, RSA, and the San Diego Natural History Museum) by Dudek biologist Marc Doalson revealed that 14 collections of this plant have been made in Ventura, Orange, Riverside, Los Angeles, and San Diego counties. Eight collections date from 1901 to



1987 (1901, 1918, 1922, 1928, 1931, 1959, 1985 and 1987). There are six more recent collections dating from 1994 to 2003 (1994, two from 1995, 1997 and two from 2003). Many are from somewhat vague localities, such as "San Fernando Valley" and "Pasadena." Modern collections have come mostly from the Santa Ana Mountains region and especially Temescal Wash in western Riverside County, with several collections from adjacent San Diego County. In addition to the herbaria specimens, the *G*. sp. *nova* has been observed in 2003 and 2004 along Castaic Creek and the Santa Clara River in Los Angeles County. Plants are almost always associated with alluvial soils, often being found on the benches along major washes.

#### **Bryophytes (Non-vascular Plants) and Lichens**

Bryophytes (non-vascular plants including mosses, liverworts, and hornworts) include plants which lack specialized water- or nutrient-conducting tissue. Lacking water-transporting tissue, bryophytes must live in proximity to a moisture source and are commonly found in damp or shady microhabitats. Overall, the VCC study area is very arid and supports little of this type of habitat; however, limited quantities of mosses were found on north-facing slopes and along shady banks and cut faces of ephemeral stream channels.

Lichens, in contrast, are not classified as plants but are instead unique mutualistic associations of fungi with green algae and/or cyanobacteria. Lichens are extremely widespread in nature; they are found at nearly every latitude and altitude on earth. Lichens often grow on exposed rocks but are also found on bare soil, tree trunks, or in one instance, completely submerged in water (Raven et al. 1992). Generally, VCC contains little habitat appropriate for the growth of lichens as rocky substrates are limited.

No special-status non-vascular plants or lichens were observed onsite or are known to occur in the proximity of the VCC study area.

#### 4.3.2 Special-status Wildlife Species

Two special-status wildlife species were identified during the September 2006 wildlife survey. Cooper's hawk (*Accipter cooperii*) is a California Special Concern Species and great egret (*Ardea alba*) is listed on the California Natural Diversity Data Base (CNDDB) as a species that warrants monitoring. Other special-status bird species were observed during surveys conducted along the Castaic Creek by Guthrie (2006). These include: five pair of least Bell's vireo (*Vireo bellii pusillus*), a federally-listed and state-listed endangered species; great blue heron (*Ardea herodias*), a species the CNDDB lists as warranting monitoring; one pair of nesting white-tailed kites (*Elanus leucurus*), a California fully protected species; Cooper's hawk; a few California horned larks (*Eremophila alpestris actia*), a California Special Concern Species; yellow warbler



(*Dendroica petechia*), a California Special Concern Species; yellow-breasted chat (*Icteria virens*), a California Special Concern Species; and southern California rufous-crowned sparrow (*Aimophila rificeps canescens*), a California Special Concern Species and a federal Special Concern Species. The tricolored blackbird (*Agelaius tricolor*) was not observed along Castaic Creek, but has been observed nearby along the Santa Clara River. The Southwestern pond turtle (*Clemmys marmorata pallida*) is a California Special Concern Species and was observed in the VCC study area in May 2003.

These and other special-status species with potential to occur within the VCC study area, based on the presence of suitable habitat and geographic range, are listed in *Table 6*. This list is confined primarily to species listed as federally- or state-listed threatened or endangered, species proposed for state and/or federal listing or candidates, species generally considered to be rare or declining, and species considered sensitive by the County of Los Angeles.

 TABLE 6

 Special-status Wildlife Species Observed or Potentially Occurring in VCC Study Area

Scientific Name	Common Name	Status Federal/State <sup>1</sup>	Primary Habitat Associations	Status Onsite or Potential to Occur
		IN	VERTEBRATES	
Branchinecta lynchi	Vernal pool fairy shrimp	FT/ None	Vernal pools; cool-water pools with low to moderate dissolved solids	Low potential to occur based on habitats present, suitable pools may be along Castaic Creek.
Danaus plexippus (wintering sites)	Monarch butterfly	None/ None	Overwinters in eucalyptus groves	Moderate potential to occur based on habitats present and sightings on adjacent parcels ( <i>e.g.</i> , Entrada, High Country).
Plebulina emigdionis	San Emigdio blue butterfly	None/None	Often near streambeds, washes, or alkaline areas. Associated with four- wing saltbrush ( <i>Atriplex canescens</i> ) and quail bush ( <i>Atriplex lentiformis</i> ).	A colony was observed in Potrero Canyon in NRSP in association with <i>Atriplex lentiformis</i> plants (Compliance Biology 2004). Suitable habitat occurs within Salt Creek area, VCC and Entrada.
			FISH	
Catostomus santaanae	Santa Ana sucker	FT/ CSC	Small, shallow, cool, clear streams less than 7 meters in width and a few centimeters to more than a meter in depth; substrates are generally coarse gravel, rubble and boulder	Low potential to occur based on habitats present, habitat may occur in Castaic Creek. Populations in the Santa Clara River were introduced (Swift et al 1993)
Gasterosteus aculeatus williamsoni	Unarmored threespine stickleback	FE/CE, CFP	Slow-moving and backwater areas.	This species is known to occur in the Santa Clara River and has been observed in the portion of the river within NRSP (ENTRIX 2005).
Gila orcuttii	Arroyo chub	None/ CSC	Warm, fluctuating streams with slow- moving or backwater sections of warm to cool streams at depths > 40 centimeters; substrates of sand or mud	Potential to occur based on habitats present, habitat may occur in Castaic Creek.



Scientific Name	Scientific Name Common Name Endoral/State1 Primary Habitat Associations		Statuc Opcito or Datantial to Occur			
Bufo californicus	Arroyo toad	FE/CSC	Stream channels for breeding(typically 3 <sup>rd</sup> order); adjacent stream terraces and uplands for foraging and wintering	Moderate potential to occur along CastaicCreek. However, this species was not observed during focused surveys conducted in 2003, 2004, or 2005 by Ecological Sciences.		
Ensatina klauberi	Large-blotched salamander	None/CSC	Oak woodland, chaparral, coastal sage scrub, coastal dunes, conifer forest	Moderate potential to occur based on sage scrub habitats present		
Rana aurora draytoni	California red- legged frog	FT/CSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow- moving water; uses adjacent uplands	Low potential to occur based on lack of suitable habitats.		
Rana mucosa	Mountain yellow- legged frog	FE, FC/CSC	Meadow streams, isolated pools, lake borders, rocky stream courses within ponderosa pine, montane hardwood- conifer and montane riparian habitat types	Very low potential to occur based on lack of suitable habitats.		
Spea hammondi	Western spadefoot	None/CSC	Most common in grasslands, coastal sage scrub near rain pools or vernal pools; riparian habitats	High potential to occur based on riparian habitat present.		
			REPTILES			
Anniella pulchra pulchra	Silvery legless lizard	None/CSC	Loose soils (sand, loam, humus) in coastal dune, coastal sage scrub, woodlands, and riparian habitats	High potential to occur based on habitat present far along Castaic Creek and Hasley Canyon.		
Aspidoscelis tigris stejnegeri	Coastal western whiptail	None/None	Coastal sage scrub, chaparral	High potential to occur based on habitat present		
<i>Charina trivirgata</i> ssp. <i>roseofusca</i>	Coastal rosy boa	None/ None	Rocky chaparral, coastal sage scrub, oak woodlands, desert and semi- desert scrub	Moderate potential to occur based on habitat present		
Diadophis punctatus modestus	San Bernardino ringneck snake	None/None	Open, rocky and somewhat moist areas near intermittent streams: grasslands, sage scrub	Moderate potential to occur based on habitat present		
Emys [=Clemmys] marmorata pallida	Southwestern pond turtle	None/ CSC	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used during winter	Species observed on site on 5/29/03. Moderate potential to still occur on site.		
<i>Phrynosoma</i> <i>coronatum (blainvillei</i> population)	Coast (San Diego) horned lizard	None/ CSC	Coastal sage scrub, annual grassland, chaparral, oak and riparian woodland, coniferous forest	High potential to occur based on sage scrub habitat present		
Salvadora hexalepis virgultea	Coast patch-nosed snake	None/CSC	Chaparral, coastal sage scrub, washes, sandy flats, rocky areas	Moderate potential to occur based on sage scrub habitat present.		
Thamnophis hammondii	Two-striped garter snake	None/ CSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	High potential to occur based on riparian habitat present		
<i>Thamnophis sirtalis</i> ssp.	South Coast garter snake	None/ CSC	Marshes, meadows, sloughs, ponds, slow-moving water courses	Low potential to occur based on lack of suitable habitat.		



Scientific Name	Common Name	Status Federal/State <sup>1</sup>	Primary Habitat Associations	Status Onsite or Potential to Occur		
BIRDS						
Accipiter cooperii (nesting)	Cooper's hawk	None/ CSC	Riparian and oak woodlands, montane canyons	Species observed on site during 2006 surveys (Dudek September 2006 and Guthrie 2006 surveys)		
Accipiter striatus (nesting)	Sharp-shinned hawk	None/ CSC	Nests in coniferous forests, ponderosa pine, black oak, riparian deciduous, mixed conifer, Jeffrey pine; winters in lowland woodlands and other habitats	High potential to occur during winter months		
Agelaius tricolor (nesting colony)	Tricolored blackbird	BCC, USBC/ CSC/ Aud	Nests near fresh water, emergent wetland with cattails or tules; forages in grasslands, woodland, agriculture	High potential to forage in study area based on grassland present and adjacent observations along Santa Clara River; no breeding habitat present onsite		
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/ CSC	Grass-covered hillsides, coastal sage scrub, chaparral with boulders and outcrops	Species observed on site during 2006 surveys (Guthrie 2006)		
Ammodramus savannarum	Grasshopper sparrow	SMC/ None	Open grassland and prairie, especially native grassland with a mix of grasses and forbs	Moderate potential to occur based on grassland habitat present		
Amphispiza belli belli	Bell's sage sparrow	BCC, SMC/ CSC	Coastal sage scrub and dry chaparral along coastal lowlands and inland valleys	Moderate potential to occur based on sage scrub habitat present		
Aquila chrysaetos (nesting and wintering)	Golden eagle	BCC/ CSC, P	Open country, especially hilly and mountainous regions; grassland, coastal sage scrub, chaparral, oak savannas, open coniferous forest	High potential to forage onsite based on scrub and grassland habitat present; breeding resources available in the vicinity of the site		
Ardea alba	Great egret (rookery)	None/None	Nests colonially in large trees. Rookery sites are typically located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	Observed onsite; no rookery sites were observed in 2006 surveys.		
Ardea herodias	Great blue heron	None/None	Variety of habitats, but primarily wetlands; lakes, rivers, marshes, mudflats, estuaries, saltmarsh, riparian habitats	Species observed on site during surveys (Dudek September 2006 and Guthrie 2006 surveys)		
Asio flammeus (nesting)	Short-eared owl	USBC/ CSC/ Aud	Grassland, prairies, dunes, meadows, irrigated lands, saline and freshwater emergent wetlands	High potential to occur based on grassland habitat present. Species observed in Newhall Ranch High Country during fall 2005 surveys.		
Asio otus (nesting)	Long-eared owl	None/ CSC	Riparian, live oak thickets, other dense stands of trees, edges of coniferous forest	Moderate potential to occur based on habitat present. Species observed in Newhall Ranch High Country during fall 2005 surveys. This species is sensitive to urban development.		
Athene cunicularia (burrow sites)	Burrowing owl	BCC/CSC	Grassland, lowland scrub, agriculture, coastal dunes and other artificial open areas	Moderate potential to occur based on scrub and grassland habitat present.		



		Status		
Scientific Name	Common Name	Federal/State <sup>1</sup>	Primary Habitat Associations	Status Onsite or Potential to Occur
Botaurus lentiginosus	American bittern	USBC, SMC/	Emergent habitat of freshwater	Moderate potential to occur based on
		None	marsh and vegetation borders of	habitat present. Species observed
			portus anu lakes	approximately one mile south of VCC
				in Sentember 2006
Buteo lineatus	Red-shouldered	None/ None	Riparian and woodland habitats,	High potential to occur based on
	hawk		eucalyptus	riparian habitat present.
Buteo regalis	Ferruginous hawk	BCC, SMC/	Open, dry country, grasslands, open	Moderate potential to occur as winter
(wintering)		CSC Aud	fields, agriculture	forager based on grassland habitat
Putoo cupinconi	Swaincon's howk		Open grassland, shruhlands	present.
(nesting)	SWAILISULIS LIAWK	ST/ Aud	croplands	habitats present
Campylorhynchus	Coastal (San	BCC/ CSC	Southern cactus scrub, maritime	Low potential to occur based on lack
brunneicapillus	Diego) cactus wren		succulent scrub, cactus thickets in	of cactus scrub habitat .
sandiegensis			coastal sage scrub	
Carduelis lawrencei	Lawrence's	BCC/None	Valley foothill hardwood, valley	Observed within the riparian habitats
	goldfinch		toothill hardwood-conifer; and, in S.	within NRSP during annual bird
			ninvon-iuniner and lower montane	foraging babitat is present within
			habitats	NRSP. Salt Creek area. VCC and
				Entrada.
Cathartes aura	Turkey vulture	None/ None	Rangeland, agriculture, grassland;	Species observed on site during
			uses cliffs and large trees for	September 2006 surveys, limited
Cathorus ustulatus	Swaincon's thrush	Nono/ Nono	roosting, nesting and resting	hesting opportunities are also present
Calilaius usiulaius	Swallisoff S thrush	NUTE/ NUTE	understory and dense shrubs	riparian habitats present
Circus cyaneus	Northern harrier	None/ CSC	Open wetlands (nesting), pasture, old	High potential to forage onsite based
(nesting)			fields, dry uplands, grasslands,	on scrub and grassland habitat
		50 500 01/0/	rangelands, coastal sage scrub	present
Coccyzus	Western yellow-	FC, BCC, SMC/	Dense, wide riparian woodlands and	Low potential to occur based on
americanus occidentalis (nesting)	Dilled CUCKOO	SE	understories	during Guthrie's 2006 focused
occidentalis (nesting)				surveys.
Dendroica petechia	Yellow warbler	None/ CSC	Nests in lowland and foothill riparian	Species observed in riparian habitat
brewsteri (nesting)			woodlands dominated by	during 2006 surveys (Guthrie 2006)
			cottonwoods, alders and willows;	
	M/bito toilod kito		winters in a variety of habitats	Creation abcomund on aits during
(nosting)	white-tailed kite	ININBINIC/ P	babitats agriculture wetlands oak	2006 surveys (Guthrie 2006) Both
(nesung)			woodlands, riparian	scrub and grassland foraging habitat
				and riparian nest habitat is present.
Empidonax traillii	Southwestern	FE, USBC/ SE/	Riparian woodlands along streams	Moderate potential to occur based on
extimus (nesting)	willow flycatcher	Aud	and rivers with mature, dense stands	riparian habitats present. Not
			of willows or alders; may nest in	observed during Guthrie's 2006
Eremonhila alnestris	California borned	None/ CSC	Open habitats, grassland, rangeland	Species observed on site during
actia	lark		shortgrass prairie, montane	2006 surveys (Guthrie 2006).
			meadows, coastal plains, fallow grain	Grassland and agriculture habitat
			fields	present onsite.



 TABLE 6

 Special-status Wildlife Species Observed or Potentially Occurring in VCC Study Area

		Status		
Scientific Name	Common Name	Federal/State <sup>1</sup>	Primary Habitat Associations	Status Onsite or Potential to Occur
Falco columbarius (wintering)	Merlin	None/ CSC	Nests in open country, open coniferous forest, prairie; winters in open woodlands, grasslands, cultivated fields, marshes, estuaries and sea coasts	Moderate potential to forage in grassland and agriculture habitat.
Falco mexicanus (nesting)	Prairie falcon	BCC/ CSC	Grassland, savannas, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Moderate potential for foraging in grassland and agriculture and low potential for nesting based on habitat present
Falco peregrinus anatum	American peregrine falcon	BCC, (FD) / SE, P	Nests on cliffs, buildings, bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present	Moderate potential to forage in study area based on habitat present.
Haliaeetus leucocephalus (nesting & wintering)	Bald eagle	FT/SE, P	Seacoasts, rivers, swamps, large lakes; winters at large bodies of water in lowlands and mountains	Very low potential to occur based on lack of suitable habitats.
Icteria virens (nesting)	Yellow-breasted chat	None/ CSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles and dense brush.	Species observed in riparian habitat during 2006 surveys (Guthrie 2006)
<i>Lanius ludovicianus</i> (nesting)	Loggerhead shrike	BCC/ CSC	Open ground including grassland, coastal sage scrub, broken chaparral, agriculture, riparian, open woodland	High potential to occur based on scrub and grassland habitat present. Species observed in High Country site during fall 2005 surveys.
<i>Nycticorax nycticorax</i> (rookery)	Black-crowned night heron	None/ None	Marshes, ponds, reservoirs, estuaries; nests in dense-foliaged trees and dense fresh or brackish emergent wetlands	Low potential to occur based on lack of suitable habitats.
<i>Piranga rubra</i> (nesting)	Summer tanager	None/CSC	Nests in riparian woodland; winter habitats include parks and residential areas	Moderate potential to occur based on lack of suitable habitat.
Polioptila caeurulea	Blue-gray gnatcatcher	None/None	Chaparral, brushland	High potential to occur based on habitats present. Species observed during Guthrie's 2006 survey (not specified where) and in High Country during fall 2005 surveys.
Polioptila californica californica	Coastal California gnatcatcher	FT, USBC/ CSC/ Aud	Coastal sage scrub, coastal sage scrub-chaparral mix, coastal sage scrub-grassland ecotone, riparian in late summer	Low potential due to habitat disturbance. It is within elevation range, but at edge of geographic range. No records of occurrences in study area. Lack of data in USGS quads.
Progne subis (nesting)	Purple martin	None/ CSC	Nests in tall sycamores, pines, oak woodlands, coniferous forest; forages over riparian, forest and woodland	Moderate potential to occur based on riparian habitats present
Pyrocephalus rubinus flammeus	Vermillion flycatcher	None/ CSC	Breeding habitat includes riparian woodlands, riparian scrub, and freshwater marshes	Moderate potential to occur based on habitats present, but very uncommon.
Siala mexicana	Western bluebird	None/None	Open forests of deciduous, coniferous or mixed trees, savanna, edges of riparian woodland	High potential to occur based on habitats present. Species observed in High Country during fall 2005 surveys.



Scientific Name	Common Namo	Status	Drimory Habitat Associations	Status Opsita or Potontial to Occur
Tachycineta bicolor	Tree swallow	None/ None	Nests in cavity-containing trees or snags near or in water; riparian forest and woodland, lodgepole pine belt; forages over water	Moderate potential to occur based on riparian habitats present
<i>Vireo bellii pusillus</i> (nesting)	Least Bell's vireo	FE, BCC, USBC/ SE/ Aud	Nests in southern willow scrub with dense cover within 1-2 meters of the ground; habitat includes willows, cottonwoods, baccharis, wild blackberry or mesquite on desert areas	Five pairs observed along Castaic Junction (not in VCC) and along Castaic Creek (in VCC) during 2006 surveys (Guthrie 2006). Of the five pairs, one pair is within or adjacent to the study area (two other sightings within or adjacent to study area are unconfirmed for pairs).
			MAMMALS	
Antrozous pallidus	Pallid bat	CSC/ WBWG	Rocky outcrops, cliffs, and crevices with access to open habitats for foraging	Moderate potential to forage in study area based on habitats present
Choeronycteris mexicana	Mexican long- tongued bat	None/ CSC/WBWG	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland. Roosts in caves, mines, and buildings.	Low potential to occur based on lack of suitable habitats.
Coryorhinus townsendii	Townsend's big- eared bat	CSC/ WBWG	Mesic habitats, gleans from brush or trees or feeds along habitat edges	Moderate potential to forage in study area based on habitat present
Eumops perotis californicus	Western mastiff bat	CSC/ WBWG	Roosts in small colonies in cracks and small holes, seeming to prefer man-made structures	Moderate potential to to forage in study area based on habitat present
Euderma maculata	Spotted bat	None/ CSC	Occupies a wide variety of habitats from arid deserts and grasslands, to mixed conifer forests. Feeds over water and along washes. Needs rock crevices in cliffs or caves for roosting.	Moderate potential to forage in study area based on habitat present
Lassiurus xanthinus	Western yellow bat	None//None	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland.	Low potential to occur based lack of suitable habitats
Lepus californicus bennettii	San Diego black- tailed jackrabbit	None/ CSC	Arid habitats with open ground; grasslands, coastal sage scrub, agriculture, disturbed areas, rangelands	High potential to occur based on grassland and agriculture habitat present.
Myotis leibii(=ciliolabrum)	Small-footed myotis	None/None	Caves, old mines, abandoned buildings	Low potential to occur based on lack of suitable habitats.
Myotis thysanodes	Fringed myotis	None/ None/ WBWG	Open habitats, early successional stages, streams, lakes, and ponds are foraging areas	Moderate potential to forage in study area based on habitat present.
Myotis volans	Long-legged myotis	None/ None/ WBWG	Feeds over open water and over open habitats, using denser woodlands and forests for cover and reproduction	Moderate potential to forage in study area based on habitat present.
Myotis yumanensis	Yuma myotis	None/ None	Closely tied to open water which is used for foraging; open forests and woodlands are optimal habitat	Low potential to occur based on lack of suitable habitats.



# TABLE 6 Special-status Wildlife Species Observed or Potentially Occurring in VCC Study Area

Scientific Name	Common Name	Status Federal/State <sup>1</sup>	Primary Habitat Associations	Status Onsite or Potential to Occur
Neotoma lepida intermedia	San Diego desert woodrat	None/ CSC	Coastal sage scrub, chaparral, pinyon-juniper woodland with rock outcrops, cactus thickets, dense undergrowth	High potential to occur based on habitats present
Nyctinomops femorosaccus	Pocketed free-tailed bat	None/ CSC	Rocky desert areas with high cliffs or rock outcrops	Low potential to occur based on lack of suitable habitat.
Nyctinomops macrotis	Big free-tailed bat	None/ CSC	Rugged, rocky canyons	Low potential to occur based on lack of suitable habitat.
Odocoileus hemionus	Mule deer	None/ Regulated	Coastal sage scrub, chaparral, riparian, woodlands, forest; often browses in open areas adjacent to cover	High potential to occur based on habitats present. Species observed in High Country during fall 2005 surveys.
Onychomys torridus ramona	Southern grasshopper mouse	None/ CSC	Grassland, sparse coastal sage scrub	Moderate potential to occur based on scrub and grassland habitats present, however species is very uncommon.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None/ CSC	Grassland, coastal sage scrub, disturbed habitats; fine, sandy soils	Low potential to occur based on known range
Puma concolor	Mountain lion	None/Regulated	Coastal sage scrub, chaparral, riparian, woodlands, forest; rests in rocky areas, and on cliffs and ledges that provide cover	Moderate potential to occur based on habitats present, although general area may be too urbanized for regular occurrences. Species tracks observed in High Country during fall 2005 surveys.
Taxidea taxus	American badger	None/ CSC	Dry, open treeless areas, grasslands, coastal sage scrub	Moderate potential to occur based on habitats present. Species tracks observed in High Country during fall 2005 surveys.

The federal and state status of species primarily is based on the Special Animals List (July 2005), California Department of Fish and Game.

Federal Designat	lions:	State Designati	ons:
BCC	Fish and Wildlife Service: Birds of Conservation Concern	CSC	California Special Concern Species
FC	Candidate for federal listing as threatened or endangered	Р	California Department of Fish and Game Protected and
(FD)	Federally-delisted; monitored for five years		Fully Protected Species
FE	Federally-listed Endangered	SE	State-listed as Endangered
FT	Federally-listed as Threatened	ST	State-listed as Threatened
MNBMC	Fish and Wildlife Service Migratory Nongame Birds of		
	Management Concern	Other:	
PFT	Proposed for listing as Federally Threatened	AFS E	American Fisheries Society Endangered classification
USBC	United States Bird Conservation Watch List	Aud	Audubon Society Watch list
SMC	Fish and Wildlife Service Region 1 Species of Management	WBWG	Western Bat Working Group High Priority species
	Concern		

#### 4.3.3 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by assuring continual exchange of genes between populations, providing access to adjacent habitat



areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (*e.g.*, fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as stepping stones for dispersal.

Castaic Creek runs in a northeast to southwest direction through the VCC study area. This creek is a tributary to the Santa Clara River, located off site to the south. Both water courses serve as local regional wildlife corridors and habitat linkages, supporting both "live-in" and transient habitat for special-status bird, reptile, amphibian and mammal species.

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Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

# Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

#### LYCOPODIAE

SELAGINELLACEAE – SPIKE-MOSS FAMILY

Selaginella bigelovii – Bigelow's spike-moss

#### FILACEAE

#### PTERIDACEAE - BRAKE FAMILY

*Pellaea andromedifolia* var. *andromedifolia* – coffee fern *Pentagramma triangularis* ssp. *viscosa* – goldenback fern

#### CONIFERAE

#### **PINACEAE – PINE FAMILY**

Pinus sp. - pine

#### ANGIOSPERMAE (DICOTYLEDONES)

#### AIZOACEAE - CARPET-WEED FAMILY

- \* *Mesembryanthemum crystallinium* crystalline ice plant
- \* *Mesembryanthemum nodiflorum* small-flowered ice plant

#### AMARANTHACEAE – AMARANTH FAMILY

*Amaranthus albus* – tumbleweed *Amaranthus blitoides* – prostrate amaranth

\* Amaranthus retroflexus – rough pigweed

#### ANACARDIACEAE - SUMAC FAMILY

*Rhus ovata* – sugar-bush *Rhus trilobata* – squaw bush

#### **APIACEAE – CARROT FAMILY**

*Apiastrum angustifolium* – wild celery *Bowlesia incana* – bowlesia

- \* *Conium maculatum* poison-hemlock *Daucus pusillus* – rattlesnake weed
- \* *Foeniculum vulgare* sweet fennel

### Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

#### APOCYNACEAE – DOGBANE FAMILY

\* Nerium oleander – oleander

#### ASCLEPIADACEAE – MILKWEED FAMILY

Asclepias eriocarpa - Indian milkweed

#### ASTERACEAE – SUNFLOWER FAMILY

Achillea millefolium var. californica – varrow Acourtia microcephala - sacapellote Agoseris grandiflora – mountain dandelion Ambrosia acanthicarpa – annual burweed Ambrosia confertifolia - weak-leaved burweed Ambrosia dumosa – white bursage Ambrosia psilostachya – western ragweed Artemisia californica – coastal sagebrush Artemisia tridentata ssp. tridentata – Great Basin sagebrush \* Arctotis hisuta - African daisy Artemisia dracunculus - tarragon Artemisia douglasiana – California mugwort Baccharis pilularis – coyote brush Baccharis salicifolia – mulefat Baccharis sarothroides – chaparral broom Brickellia californica - California brickellbush Brickellia nevinii - Nevin's brickellbush \* Carduus pycnocephalus – Italian thistle \* Centaurea melitensis – star thistle \* Centaurea solstitialis – yellow star thistle Chaenactis glabriuscula - yellow pincushion \* Chamomilla suaveolens – pineapple weed Chrysothamnus nauseousus – rubber rabbitbrush Cirsium occidentale var. californicum – California thistle \* *Cirsium vulgare* – Bull thistle \* *Cnicus benedictus* – blessed thistle Conyza canadensis - horseweed Coreopsis bigelovii - tickseed

\* Cotula australis – brass buttons

\* *Dimorphotheca sinuata* – Cape-marigold

# Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

Encelia californica - California bush sunflower Encelia farinosa - brittlebush, incensio Ericameria palmeri var. pachylepis – Goldenbush Erigeron foliosus var. stenophyllus – leafy daisy *Eriophyllum confertiflorum* – long-stem golden yarrow Filago californica - California fluffweed \* Filago gallica - narrow-leaf filago \* Gazania linearis – African daisy Gnaphalium sp. (undescribed) nova – everlasting Gnaphalium californicum - California everlasting Gnaphalium canescens ssp. Microcephalum - white everlasting Gnaphalium luteo-album – white cudweed Hazardia sp. - goldenbush Helianthus annuus – common sunflower Hemizonia fasciculata - fascicled tarweed *Heterotheca grandiflora* – telegraph weed *Heterotheca psammophila* – camphor weed Heterotheca sessiliflora – golden aster *Heterotheca sessiflora* ssp. *fastigiata* – telegraph weed \* *Hypochaeris glabra* – smooth cat's-ear Isocoma menziesii ssp. veneta – coastal Goldenbush \* Lactuca serriola – prickly lettuce Lasthenia californica - coast goldfields Lasthenia glabrata ssp. coulteri – Coulter's goldfields *Lepidospartum squamatum* – scale-broom *Lessingia filaginifolia* – virgate cudweed aster Madia gracilis - slender tarweed Malacothrix saxatilis var. commutate - cliff desert dandelion Malacothrix saxatilis - cliff malacothrix var. tenuifolia - cliff malacothrix \* Matricaria marticarioides – pineapple weed Micropus californicus - slender cottonweed *Microseris douglasii* – Douglas' microseris Microseris lindleyi – Lindley's microseris \* Picris echioides - bristly ox-tongue Pluchea odorata - marsh-fleabane Pluchea sericea – arrow weed

\* *Pulicaria paludosa* – Spanish sunflower

## **Cumulative List of Vascular Plant Species Observed** Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

	Rafinesquia californica – California chicory
	Senecio californica – California groundsel
	Senecio californicus – California butterweed
	Senecio flaccidus var. douglasii – butterweed
*	Senecio vulgaris – common groundsel
	Silybum marianum – milk thistle
	Solidago californica – California goldenrod
*	Sonchus asper – prickly sow-thistle
*	Sonchus oleraceus – common sow-thistle
	Stephanomeria sp. – wreathplant
	Stephanomeria virgata – twiggy wreathplant
	<i>Stylocline gnaphalioides</i> – everlasting nest-straw
	<i>Tetradyma comosa</i> – hairy horsebrush
	Uropappus lindleyi – silver puffs
	Xanthium strumarium – cocklebur
BOF	RAGINACEAE – BORAGE FAMILY
	Amsinckia menziesii – yellow fiddleneck
	<i>Amsinckia intermedia</i> – common fiddleneck
	Conntantha intermedia common forget me not

*Cryptantha intermedia* – common forget-me-not Cryptantha micrstachys – Tejon cryptantha Cryptantha muricata – prickly cryptantha Cryptantha nevadensis – Nevada cryptantha Cryptantha spp. – forget-me-not *Heliotropium curassavicum* – wild heliotrope Pectocarya linearis – slender pectocarya Pectocarya recurvata – pectocarya Plagiobothrys canescens – rusty popcorn flower Plagiobothrys nothofulvus – popcorn flower *Plagiobothrys fulvus* – no common name *Plagiobothrys* sp. – popcorn flower genus

#### **BRASSICACEAE – MUSTARD FAMILY**

- \* *Brassica nigra* – black mustard
- \* Brassica rapa – turnip
- \* Brassica tournefortii – mustard *Erysimum capitatum* – western wallflower



# Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

*Capsella bursa pastoris* – shepherd's purse

- Erysimum capitatum ssp. capitatum western wallflower
- \* Hirschfeldia incana short-podded mustard
- \* Lobularia maritime sweet alyssum
- \* Sisymbrium altissimum tumble mustard
- \* Sisymbrium irio London rocket
- Sisymbrium orientale Oriental mustard
   Stanleya pinnata var. pinata prince's plume
   Thysanocarpus curvipes hairy fringepod
   Thysanocarpus laciniatus narrow-leaved fringepod

#### **CACTACEAE – CACTUS FAMILY**

*Opuntia basilaris* var. *ramosa* – beavertail cactus *Opuntia littoralis* – coastal prickly-pear *Opuntia parryi* – valley cholla

#### **CAPPARACEAE – CAPER FAMILY**

*Isomeris arborea* – bladderpod

#### **CAPRIFOLIACEAE – HONEYSUCKLE FAMILY**

*Lonicera subspicata* – southern honeysuckle *Sambucus mexicana* – Mexican elderberry

#### **CARYOPHYLLACEAE – PINK FAMILY**

- \* Silene gallica common catchfly
- \* Stellaria media common chickweed

#### CHENOPODIACEAE – GOOSEFOOT FAMILY

Atriplex canescens – four-winged saltbush Atriplex lentiformis – big saltbush, quail brush Atriplex semibaccata – Australian saltbush Atriplex suberecta – Australian saltbush Chenopodium album – lamb's quarters Chenopodium berlandieri – pitseed goosefoot Chenopodium californicum – California goosefoot Chenopodium murale – nettle-leaved goosefoot

\* Salsola tragus – Russian-thistle

### Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

#### **CRASSULACEAE – STONECROP FAMILY**

*Crassula connata* – dwarf stonecrop *Dudleya lanceolata* – lanceleaf dudleya

#### **CONVOLVULACEAE – MORNING-GLORY FAMILY**

Calystegia macrostegia – western bindweed Calystegia peirsonii – Peirson's morning-glory Convolvulis arvensis – bindweed

#### **CRASSULACEAE – STONECROP FAMILY**

*Crassula connata* – dwarf stonecrop *Dudleya lanceolata* – lanceleaf dudleya

#### **CUCURBITACEAE – GOURD FAMILY**

Cucurbita foetidissima - coyote-melon, calabazilla

\* *Marah fabaceus* – cucumber *Marah macrocarpus* – wild cucumber

#### **CUSCUTACEAE – DODDER FAMILY**

Cuscuta californica – California dodder

#### **EUPHORBIACEAE – SPURGE FAMILY**

Chamaesyce albomarginata – rattlesnake spurge Chamaesyce polycarpa – small-seed sand mat Croton californicus – California croton Eremocarpus setigerus – doveweed Euphorbia spathulata – reticulate-seeded spurge Stillingia linearifolia – linear-leaved stillingia

#### FABACEAE – PEA FAMILY

Astragalus trichopodus – Santa Barbara locoweed Lotus hamatus – grab lotus Lotus purshianus – Spanish-clover Lotus salsuginosus – coastal lotus Lotus scoparius – deerweed Lotus strigosus – strigose deerweed Lotus wrangelianus – California lotus

### Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

Lupinus bicolor – Lindley's annual lupine Lupinus arizonicus – Arizona lupine Lupinus hirsutissimus – stinging lupine Lupinus excubitus var. hallii – grape soda lupine Lupinus formosus var. formosus – no common name Lupinus microcarpus var. densiflorus – chick lupine Lupinus microcarpus var. microcarpus – chick lupine Lupinus sparsiflorus – Coulter's lupine Lupinus succulentis – arroyo lupine Lupinus truncatus – collar lupine

- \* *Medicago sativa* alfalfa
- \* *Medicago polymorpha* California burclover
- \* *Melilotus alba* white sweet-clover
- \* Melilotus indica yellow sweet-clover Trifolium albopurpureum – Indian clover Trifolium ciliolatum – tree clover Trifoliun gracilentum – clover Trifolium willdenovii – wildcat clover
- \* Vicia benghalensis purple vetch Vicia hassei – slender vetch
- \* Vicia villosa var. varia hairy vetch

#### FAGACEAE - BEECH FAMILY

Quercus sp. – oak Quercus agrifolia – coast live oak Quercus john-tuckerii – Tucker's oak Quercus lobata – valley oak

#### **GERANIACEAE – GERANIUM FAMILY**

- \* Erodium cicutarium red-stemmed filaree
- \* Erodium moschatum white-stemmed filaree

#### **GROSSULARIACEAE – CURRANT FAMILY**

Ribes aureum – golden currant

#### HYDROPHYLLACEAE – WATERLEAF FAMILY

*Emmenanthe penduliflora* – whispering bells



# Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

Eriodictyon crassifolium var. nigrescens – yerba santa Eucrypta chrysanthemifolia – common eucrypta Phacelia cicutaria var. hispida – caterpillar phacelia Phacelia distans – wild heliotrope Phacelia parryi – Parry's phacelia Phacelia ramosissima – shrubby phacelia Phacelia tanacetifolia – phacelia

#### JUGLANDACEA – WALNUT FAMILY

Juglans californica - Southern California black walnut

#### LAMIACEAE - MINT FAMILY

\* Lamium amplexicaule – dead nettle

*Marrubium vulgare* – horehound
 Salvia apiana – white sage
 Salvia columbariae – chia
 Salvia leucophylla – purple sage
 Salvia mellifera – black sage
 Trichostema lanceolatum – vinegar weed

#### MALVACEAE - MALLOW FAMILY

Malacothamnus fasciculatus – mesa bushmallow

\* Malva parviflora – cheeseweed

#### NYCTAGINACEAE – FOUR O'CLOCK FAMILY

Mirabilis californica – California wishbone-bush

#### **ONAGRACEAE – EVENING-PRIMROSE FAMILY**

Camissonia bistorta – California sun cup Camissonia boothii – desert lantern Camissonia californica – mustard primrose Camissonia cheiranthifolia – beach evening primrose Camissonia hirtella – field sun cup Camissonia micrantha – miniature sun cup Camissonia strigulosa – sandy soil sun cup Clarkia purpurea – winecup clarkia Clarkia unguiculata – elegant clarkia

## Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

*Epilobium ciliatum* – California cottonweed *Oenothera californica* – California evening primrose *Oenothera elata* – evening primrose

#### PAPAVERACEAE – POPPY FAMILY

Eschscholzia californica – California poppy Platystemon californicus var. crinitus – cream cups Stylomecon heterophylla – wind poppy

#### PLANTAGINACEAE – PLANTAIN FAMILY

*Plantago erecta* – dot-seed plantain *Plantago* sp. – plantain

#### POLEMONIACEAE – PHLOX FAMILY

Eriastrum densifolium ssp. densifolium – woolly star Eriastrum densifolium ssp. elongatum – chaparral woolly-star Eriastrum sapphirinum – sapphire eriastrum Gilia angelensis – angel gilia Gilia capitata – ball gilia Leptodactylon californicum – prickly phlox Linanthus pygmaeus – linanthus

#### **POLYGONACEAE – BUCKWHEAT FAMILY**

Chorizanthe parryi var. fernandina – San Fernando Valley spineflower Chorizanthe staticoides – turkish rugging Eriogonum baileyi – Bailey's buckwheat Eriogonum brachyanthum – short-flowered buckwheat Eriogonum elongatum – long-stemmed buckwheat Eriogonum fasciculatum ssp. foliolosum – California buckwheat Eriogonum angulosum – wild buckwheat Eriogonum gracile – slender woolly buckwheat Lastarriaea coriacea – lastarriaea Polygonum arenastrum – common knotweed Pterostegia drymarioides – California threadstem Rumex crispus – curly dock

- Rumex hymenosepalus wild rhubarb
- \* Rumex obtusifolius dock

# DUDEK

\*

## Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

#### **PORTULACACEAE – PURSLANE FAMILY**

*Calandrinia ciliata* var. *menziesii* – redmaids *Calyptridium monandrum* – common calyptridium *Claytonia perfoliata* var. *perfoliata* – miner's-lettuce

\* *Portulaca oleracea* – common purslane

#### **RANUNCULACEAE – CROWFOOT FAMILY**

Delphinium parryi ssp. parryi – Parry's larkspur

#### **RHAMNACEAE – BUCKTHORN FAMILY**

*Ceanothus megacarpus* – big-podded Ceanothus *Rhamnus ilicifolia* – holly-leaf redberry

#### **ROSACEAE – ROSE FAMILY**

Adenostoma fasciculatum – chamise Heteromeles arbutifolia – toyon Physanocarous alteranus – ninebark Prunus ilicifolia – holly-leaf cherry Rubus ursinus – California blackberry

#### **RUBIACEAE – MADDER FAMILY**

*Galium angustifolium* – narrow-leaved bedstraw

*Galium aparine* – goose grass
 *Galium nuttallii* – Nuttall's bedstraw

#### SALICACEAE - WILLOW FAMILY

Populus fremontii – Fremont's cottonwood Salix exigua – narrow-leaved willow Salix laevigata – red willow Salix lasiolepis – arroyo willow

#### SCROPHULARIACEAE - FIGWORT FAMILY

Antirrhinum coulterianum – white snapdragon Antirrhinum kelloggii – climbing snapdragon Castilleja affinis – coast paintbrush Castilleja exserta – common owl's-clover Castilleja foliolosa – woolly Indian paintbrush

# Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

Collinsia heterophylla – Chinese houses Mimulus aurantiacus – bush monkeyflower Mimulus brevipes – wide-throat monkeyflower Penstemon centranthifolius – scarlet bugler Scrophularia californica var. floribunda – coast figwort Veronica anagallis-aquatica – water speedwell

#### SOLANACEAE - NIGHTSHADE FAMILY

Datura wrightii - western jimsonweed

Nicotiana glauca – tree tobacco
 Nicotiana quadrivalvis – Wallace's tobacco
 Solanum americanum – small-flowered nightshade
 Solanum douglasii – white nightshade
 Solanum umbelliferum – blue witch
 Solanum xanti – chaparral nightshade

#### TAMARICACEAE – TAMARISK FAMILY

- \* Tamarix sp. tamarisk
- \* Tamarix gallica French tamarisk
- \* Tamarix ramosissima salt cedar

#### **URTICACEAE – NETTLE FAMILY**

- Urtica dioica giant creek nettle
- \* Urtica urens dwarf nettle

#### VISCACEAE – MISTLETOE FAMILY

Phoradendron macrophyllum - big leaf mistletoe

#### **ZYGOPHYLLACEAE – CALTROP FAMILY**

\* Tribulus terrestris – puncture vine

#### ANGIOSPERMAE (MONOCOTYLEDONES)

#### **ARECACEAE – PALM FAMILY**

\* Washingtonia robusta – Mexican fan palm

# Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

#### **CYPERACEAE – SEDGE FAMILY**

Cyperus esculentus – yellow nut-grass

#### LILIACEAE - LILY FAMILY

Calochortus clavatus var. gracilis – slender mariposa lily Chlorogalum pomeridianum – soap plant Dichelostemma capitatum – blue dicks Yucca whipplei – Our Lord's candle

#### POACEAE - GRASS FAMILY

Achnatherum coronatum - giant needlegrass

- \* *Arundo donax* giant reed
- \* Avena barbata slender oat
- \* Avena fatua wild oat
- \* Avena sativa common oat
   Bromus carinatus California brome
- \* Bromus diandrus ripgut grass
- \* Bromus hordeaceus soft chess
- \* Bromus madritensis ssp. rubens foxtail chess
- \* Bromus tectorum cheat grass
- Cortaderia selloana pampas grass
   Cynodon dactylon Bermuda grass
   Distichlis spicata salt grass
  - Elymus glaucus western wild rye
- \* *Hordeum murinum* glaucous foxtail barley
- \* *Hordeum brachyantherum* ssp. *brachyantherum* no common name

Leymus condensatus – giant ryegrass

Leymus triticoides – beardless wild rye

- Lolium multiflorum Italian ryegrass
- *Lolium perenne* perennial ryegrass
- *Melica imperfecta* California melic
- Melica subulata Alaska onion grass
- Muhlenbergia microsperma littleseed muhly

Nassella cernua – nodding needlegrass

Nassella lepida – foothill needlegrass

- Nassella pulchra purple needlegrass
- \* Parapholis incurva sickle grass

### Cumulative List of Vascular Plant Species Observed Valencia Commerce Center Site (2002, 2003, 2004, 2005 and 2006)

- \* Pennisetum clandestinum kikuyu grass
- \* Phalaris minor Mediterranean canary grass
- \* *Piptatherum miliaceum* smilo grass
- \* Poa annua annual bluegrass
- \* Polypogon monspeliensis rabbit's-foot grass
- \* Schismus arabicus Arabian schismus
- \* Schismus barbatus abumashi
- \* *Triticum aestivum* common wheat
- \* Vulpia myuros rattail fescue

#### **TYPHACEAE – CATTAIL FAMILY**

*Typha domingensis* – slender cattail *Typha latifolia* – broad-leaved cattail

\* signifies introduced (non-native) species

# **APPENDIX B**

Wildlife Species Observed At Valencia Commerce Center Site (2006)

# **APPENDIX B** Wildlife Species Observed Valencia Commerce Center Site (2006)

#### REPTILES

#### **IGUANIDAE – IGUANID LIZARDS**

Sceloporus occidentalis - western fence lizard

#### BIRDS

#### **ARDEIDAE – HERONS**

Ardea alba – great egret Ardea herodias – great blue heron

#### **CATHARTIDAE – NEW WORLD VULTURES**

Cathartes aura - turkey vulture

#### ACCIPITRIDAE - HAWKS

Accipiter cooperii – Cooper's hawk Buteo jamaicensis – red-tailed hawk Elanus leucurus – white-tailed kite

#### PHASIANIDAE – PHEASANTS & QUAILS

Callipepla californica – California quail

#### **CHARADRIIDAE – PLOVERS**

Charadrius vociferus – killdeer

#### **COLUMBIDAE – PIGEONS & DOVES**

\* Columba livia – rock dove

#### **TROCHILIDAE - HUMMINGBIRDS**

Calypte anna – Anna's hummingbird

#### TYRANNIDAE – TYRANT FLYCATCHERS

*Myiarchus cinerascens* – ash-throated flycatcher *Sayornis nigricans* – black phoebe *Tyrannus verticalis* – western kingbird

# **APPENDIX B** Wildlife Species Observed Valencia Commerce Center Site (2006)

#### ALAUDIDAE – LARKS

Eremophila alpestris actia – horned lark<sup>i</sup>

#### **CORVIDAE – JAYS & CROWS**

*Aphelocoma californica* – western scrub-jay *Corvus brachyrhynchos* – American crow *Corvus corax* – common raven

#### **AEGITHALIDAE – BUSHTITS**

Psaltriparus minimus – bushtit

#### **TROGLODYTIDAE – WRENS**

*Thryomanes bewickii* – Bewick's wren *Troglodytes aedon* – house wren

#### PARULIDAE – WOOD WARBLERS

*Geothlypis trichas* – common yellowthroat

#### VIREONIDAE – VIREOS

*Vireo bellii pusillus* – least Bell's vireo<sup>i</sup>

#### **EMBERIZIDAE – BUNTINGS & SPARROWS**

Aimophila rificeps canescens – southern California rufous-crowned sparrow Dendroica petechia – yellow warbler<sup>i</sup> Icteria virens – yellow-breasted chat<sup>i</sup> Melospiza melodia – song sparrow Pipilo crissalis – California towhee

#### **FRINGILLIDAE – FINCHES**

*Carpodacus mexicanus* – house finch *Carduelis psaltria* – lesser goldfinch

#### PASSERIDAE - OLD WORLD SPARROWS

\* Passer domesticus – house sparrow

DUDEK

<sup>&</sup>lt;sup>i</sup> Guthrie 2006

# **APPENDIX B** Wildlife Species Observed Valencia Commerce Center Site (2006)

#### MAMMALS

#### **LEPORIDAE – HARES & RABBITS**

Sylvilagus sp. - cottontail

#### **SCIURIDAE – SQUIRRELS**

Spermophilus beecheyi - California ground squirrel

#### **GEOMYIDAE – POCKET GOPHERS**

Thomomys bottae - Botta's pocket gopher

#### **CANIDAE – WOLVES & FOXES**

Canis latrans - coyote

#### FELIDAE – CATS

Lynx rufus - bobcat

#### \* signifies introduced (non-native) species

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